



COUNTY COUNCIL OF NORTHUMBERLAND.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

(WM. F. J. WHITLEY, M.D., D.P.H.),

for the Year 1928.


NEWCASTLE-UPON-TYNE:

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NORTHUMBERLAND COUNTY COUNCIL.

REPORT OF THE COUNTY MEDICAL OFFICER OF HEALTH
FOR THE YEAR ENDED 31st DECEMBER, 1928.

TO THE CHAIRMAN AND MEMBERS OF THE COUNTY COUNCIL
OF NORTHUMBERLAND.

MR. CHAIRMAN, MY LORDS, LADIES AND GENTLEMEN,

I beg to present my annual report for the year 1928. It is an "ordinary" report as defined by the Ministry of Health and is of a less exhaustive character than the full Survey Report required for 1925. No digest of the sanitary circumstances of county districts has been made but the vital and mortality statistics applicable to these areas have been summarised and the rates calculated.

Administration.—The official, technical and administrative staff under the direction of the County Medical Officer consists of :—

Assistant County Medical Officer and County Bacteriologist who is also Medical Officer of Health of the Newburn Urban District.

The Medical Superintendent of the Council's Sanatorium at Wooley.

Assistant Medical Superintendent of the Council's Sanatorium at Wooley.

The Matron of the Council's Sanatorium at Wooley.

The County Tuberculosis Officer (clinical).

5 Assistant County Medical Officers.

School Dentist.

County Sanitary Inspector.

Lady Superintendent of Health Visitors.

There were also, during 1928, 32 Health Visitors, and, at the central office, a clerical staff of thirteen.

Vital and Mortality Statistics.—The variations in the principal county rates during recent years are indicated in the following table. The corresponding rates for England and Wales are given for comparison :—

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Birth rate (per 1,000 living) Administrative county	22·1	28·3	25·5	22·5	22·5	22·2	20·8	20·02	17·90	18·37
England and Wales	18·5	25·4	22·4	20·6	19·7	18·8	18·3	17·8	16·6	16·7
General death rate (per 1,000 living) Administrative county	14·1	12·9	12·4	12·7	11·3	12·1	11·6	11·37	11·53	11·39
England and Wales	13·8	12·4	12·1	12·9	11·6	12·2	12·2	11·6	12·3	11·7
Infant mortality rate (per 1,000 births) Administrative county	102	90	95	87	76	83	82	77	77	67
England and Wales	89	80	83	77	69	75	75	70	70	65

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Zymotic death rate (per 1,000 living)										
Administrative county	0·92	0·76	1·04	0·41	0·74	0·40	0·67	0·53	0·27	0·28
<i>England and Wales</i> ...	0·52	0·71	0·70	0·60	0·50	0·45	0·54	0·44	0·38	0·40
Death rate from Respiratory Tuberculosis (per 1,000 living)										
Administrative county	0·97	0·92	0·87	0·88	0·85	0·82	0·78	0·73	0·81	0·68
<i>England and Wales</i> ...	0·97	0·86	0·88	0·88	0·84	0·84	0·83	0·77	0·79	0·76

A slight rise in the birth rate is indicated, though the rate for 1928 (18.37) is still lower than that for any of the eight years preceding the year 1927.

The general death rate was slightly lower than that for the previous year.

The infant mortality rate (67 per 1,000 births) was appreciably lower than that in 1927, and was the lowest recorded in the county. In this respect it coincided with the rate for England and Wales which reached the low figure of 65 per 1,000 births.

The death rate from Zymotic diseases was practically the same as the rate in the previous year, which latter was the lowest recorded for the administrative county since County statistics were tabulated.

In commenting, in the Annual Report for 1927, upon the slight rise which was shewn in that year in the death rate from Respiratory Tuberculosis, it was stated that this was possibly one of those periodic variations which might be without particular significance; the rate recorded for 1928 (0.68) is not only lower than, that for 1927 but is the lowest recorded for the county.

PUBLIC HEALTH LEGISLATION.

The only Act of administrative interest which was passed during the year was the Food and Drugs (Adulteration) Act, 1928, which repeals and consolidates the provisions of the Sale of Food and Drugs Acts 1875 to 1927, together with a number of amending provisions in other statutes, notably, the Milk and Dairies (Consolidation) Act, 1915. The date upon which the Act came into operation was January 1st, 1929.

ORDERS, CIRCULARS, ETC.

(MINISTRY OF HEALTH.)

The following are the principal Orders, etc., made during the year, of administrative interest to County Councils :—

The Alkali, etc., Works Order, 1928, No. 26, extends the provisions of the Alkali, etc., Works Regulation Act, 1906, and the Public Health (Smoke Abatement) Act, 1926, in respect of certain specified works.

The Public Health (Ophthalmia Neonatorum) Amendment Regulations, No. 419.

The Public Health (Puerperal Fever and Puerperal Pyrexia) Amendment Regulations, No. 420, and *Circular 893*, indicate a modification of the Orders of 1926; notifications of these diseases will now be sent to the M.O.H. of the district in which the patient is actually living at the time of notification.

Compensation to Midwives.—Circular 857 indicates the procedure to be adopted for the payment of compensation to midwives suspended from practice owing to their having been in contact with infectious disease.

Nursing Homes Registration Act, 1927.—Circular 862 indicates the lines upon which this Act shall operate.

Maternal Mortality.—Circulars 888 and 911 outline methods of procedure which should be adopted in the investigation of maternal deaths; Circular 911 also makes a suggestion with regard to a wider publicity of the existence of Infant Welfare Centres.

Training of Health Visitors.—Circular 879 outlines the qualifications which a candidate for an appointment as Health Visitor will be required to hold, and also indicates facilities which have been authorised with regard to training.

Small-pox among Casuals.—Circulars 859, 880, 908 and 930 indicate the precautions to be taken with a view of preventing the spread of Small-pox through the medium of Casuals.

Registers of Cases in Small-pox Hospitals.—Circular 890 urges upon Hospital Authorities the importance of a strict adherence to the requirements of Sec. 8 of the Vaccination Act, 1898, with regard to the keeping of a Register of all Small-pox patients treated in hospital.

Food and Drugs (Adulteration) Act, 1928, etc.—Circular 950 together with Memo. 36/Foods (January, 1929) indicate the method of procedure with regard to the operation of this Act.

The Public Health (Preservatives, etc., in Food) Regulations consolidates the principal Regulations made in 1925 and amending Regulations made in 1926 and 1927, and show the effect of the new Food and Drugs Act on the construction of the Regulations.

Housing (Rural Workers) Act, 1926.—Circulars 839 and 849 refer to the necessity for expediting the operation of the Act.

Pollution of Rivers.—Circular 922 draws attention to the recommendation, contained in the first report of the Joint Advisory Committee on River Pollution, that steps should be taken to secure the establishment of Joint Committees empowered to exercise the powers of the Rivers Pollution Prevention Act, 1876, over wide areas with jurisdiction over the whole river and its tributaries at least to the extent of non-tidal waters.

Treatment of ex-Servicemen suffering from Tuberculosis.—Circular 900 draws attention to the arrangements of the Ministry of Pensions, with regard to the treatment of ex-service pensioners in institutions, which cover liability for charges for treatment as distinct from vocational training or settlement, and also indicates, in this connection, that the Ministry of Pensions should not be put to extra cost, unnecessarily, through pensioners being required to travel long distances for the purpose of receiving residential treatment.

Welfare of the Blind.—Circular 883 requires a return to be furnished shewing the general and financial circumstances of unemployable blind persons over 16 years of age.

Circular 912 directs that the Head Postmaster of the district be notified of all deaths, removals from the Register and changes of address of blind licensees who hold a licence under the provisions of the Wireless Telegraphy (Blind Persons Facilities) Act, 1926.

Annual Reports of District Medical Officers.

Two reports were still outstanding at the time of going to press, viz., those for the Borough of Blyth and the Rural District of Haltwhistle.

I am, my Lords, Ladies and Gentlemen,

Your obedient servant,

WILLIAM F. J. WHITLEY.

THE ADMINISTRATIVE COUNTY.

AREA.

The area of the County is 1,278,690 acres, divided as follows:—Boroughs, 14,456 acres; urban districts, 59,807 acres; rural districts, 1,204,427 acres.

POPULATION.

The *civil* population of Northumberland (exclusive of the county boroughs of Newcastle-on-Tyne and Tynemouth) was estimated by the Registrar-General to be 407,300 in the middle of 1928. On this population the birth and mortality rates are calculated.

CHANGES IN AREA.

No alteration in the area of sanitary districts or of the administrative county was made during the year under review.

BOROUGHES, URBAN AND RURAL DISTRICTS, AND PORT SANITARY AUTHORITIES.

The County at the *end* of 1928 was divided for the purpose of sanitary administration into 31 districts, four of which were municipal boroughs, seventeen urban districts, and ten rural districts. There are also the Blyth and Tyne Port Sanitary Authorities. The authorities for the Tweed and Coquet Ports are the Council of the Borough of Berwick-on-Tweed and the Amble Urban District Council respectively.

BOROUGHES.

Berwick-on-Tweed, Blyth, Morpeth and Walsend.

The civil population of the boroughs was estimated to be 95,367 in the middle of 1928.

URBAN DISTRICTS.

Alnwick, Amble, Ashington, Bedlingtonshire, Cramlington, Earsdon, Gosforth, Hexham, Longbenton, Newbiggin-by-the-Sea, Newburn, Prudhoe, Rothbury, Seaton Delaval, Seghill, Weetslade, and Whitley and Monk-seaton.

The civil population of the urban districts was estimated to be 207,483 in the middle of 1928.

RURAL DISTRICTS.

Alnwick, Belford, Bellingham, Castle Ward, Glendale, Haltwhistle, Hexham, Morpeth, Norham and Islandshires, and Rothbury.

The civil population of the rural districts was estimated to be 104,450.

The area and population of each sanitary district in the administrative county will be found in a table opposite page 14 of this report.

BIRTHS.

According to the statistics supplied by the Registrar-General the net births belonging to the administrative county numbered 7,486—3,795 males and 3,691 females (5,854 of the births occurred in urban districts and 1,632 in rural districts).

Of the 7,486 births above-mentioned (4.8%) were illegitimate.

The birth rate for the county was 18.37 (17.90 in 1927 and 20.02 in 1926).

The following table shews the comparative rates :—

	Birth rate.	Increase since 1927.	Decrease since 1927.	Mean rate 1918-1927.
Administrative County ...	18·37	0·47	—	22·31
Urban districts ...	19·36	0·62	—	23·62
Rural districts ...	15·62	0·26	—	18·45
England and Wales ...	16·7	0·1	—	—

DEATHS.

Net deaths.—According to information supplied by the Registrar-General the net deaths numbered 4,642—2,465 males and 2,177 females (3,479 in urban and 1,163 in rural districts).

The following table shews the comparative rates :—

	Death rate.	Increase since 1927.	Decrease since 1927.	Mean rate 1918-1927.
Administrative County ...	11·39	—	0·14	12·65
Urban districts ...	11·48	—	0·23	12·85
Rural districts ...	11·13	0·13	—	12·08
England and Wales ...	11·7	—	0·6	—

Details of the deaths and death rates in the several districts are given in the table opposite page 14 of this report.

The diseases causing the greatest mortality in the administrative county during 1928 were as follows :—

Disease.	No. of deaths.	Percentage of total deaths.
Heart Disease ...	614	13·2
Cancer... ..	570	12·3
Tuberculosis ...	384	8·3
Pneumonia ...	305	6·6
Cerebral Hæmorrhage ..	294	6·3
Arterio-sclerosis ...	255	5·5
Bronchitis ...	206	4·4
	2,628	56·6

As during the preceding year, the above-named seven diseases were responsible for more than half the deaths in the administrative county.

INFANT MORTALITY.

	Number of deaths.	Death rate per 1000 births	Increase since 1927.	Decrease since 1927.	Mean rate 1918-1927.
Administrative County ...	501	67	—	10	87
Urban districts ...	420	72	—	9	93
Rural districts ...	81	49	—	11	67
England and Wales ...	42,960	65	—	5	—

The subjoined tables indicate the rates among legitimate and illegitimate infants respectively :—

	Legitimate Infants.		Illegitimate Infants.	
	No. of deaths under 1 year.	Death rate per 1000 births.	No. of deaths under 1 year.	Death rate per 1000 births.
Administrative County ...	453	63	48	133
Urban districts ...	386	68	34	139
Rural districts ...	67	44	14	119

DEATHS UNDER 5 YEARS AND AT 65 YEARS AND UPWARDS.
The rates (per 1,000 population) were as follows :—

	Under 5 years.	65 years and upwards.
Administrative County ...	1.75	4.69
Urban districts ...	1.97	4.36
Rural districts ...	1.11	5.62

INFECTIOUS DISEASES.

Notifications of Infectious Diseases received during the year 1928, under Article 14 (2) of the Sanitary Officers Order, 1926.

Sanitary districts.	Small-pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Pneumonia.	Puerperal Fever.	Puerperal Pyrexia.	Ophthalmia Neonatorum.	Erysipelas.	Tuberculosis (Respiratory.)	Tuberculosis (Other Forms).	Encephalitis Lethargica.	Acute Polio-myelitis.	Cerebro-Spinal Fever.	Anthrax.	Totals.
MUNICIPAL BOROUGHES—																
Berwick-on-Tweed ...	—	25	6	1	7	—	3	—	7	16	3	—	—	1	—	69
Blyth ...	127	26	11	1	113	3	2	10	15	75	26	3	—	—	—	412
Morpeth ...	9	8	1	1	22	—	—	—	—	12	4	2	—	—	—	59
Wallsend ...	5	100	15	2	103	2	11	4	27	152	74	2	—	—	—	497
URBAN DISTRICTS—																
Alnwick ...	—	4	1	—	—	1	—	—	—	12	1	—	—	—	—	19
Amble ...	1	1	8	—	1	—	—	—	2	3	3	1	2	—	—	22
Ashington ...	6	56	2	5	59	1	8	8	20	62	26	1	—	—	—	254
Bedlingtonshire ...	9	41	6	5	136	2	4	2	15	70	29	—	—	—	—	319
Cramlington ...	—	17	2	—	29	—	—	2	2	11	4	1	—	—	1	69
Earsdon ...	3	17	13	1	16	—	2	—	7	28	8	1	—	—	—	96
Gosforth ...	10	27	4	7	4	—	2	—	7	13	10	—	—	—	—	84
Hexham ...	1	5	—	1	39	1	1	2	2	29	5	—	—	—	—	86
Longbenton ...	3	46	12	1	40	—	2	—	4	21	7	1	—	—	—	137
Newbiggin-by-the-Sea ...	1	37	—	1	12	—	4	—	7	27	9	—	—	—	—	98
Newburn ...	—	28	8	1	63	—	2	1	9	30	29	1	—	—	—	172
Prudhoe ...	—	33	2	1	12	1	—	1	3	51	30	1	—	—	—	135
Rothbury ...	—	—	—	—	5	—	1	1	2	1	—	—	—	—	—	10
Seaton Delaval ...	1	10	4	—	63	—	3	1	9	17	11	—	—	—	—	119
Seghill ...	7	2	1	—	23	—	—	—	—	2	—	—	—	—	—	35
Weetslade ...	2	4	19	—	9	—	1	1	1	7	13	—	—	—	—	57
Whitley & Monkseaton ...	3	104	14	5	23	4	3	—	11	27	11	—	1	—	—	206
RURAL DISTRICTS—																
Alnwick ...	31	5	13	—	1	1	—	—	2	16	6	—	—	—	—	75
Belford ...	—	—	—	—	10	—	—	—	3	3	—	—	—	—	—	16
Bellingham ...	—	20	5	—	17	1	—	—	1	9	2	—	—	—	—	55
Castle Ward ...	3	14	20	1	33	—	1	—	13	22	10	1	1	—	—	119
Glendale ...	1	9	1	—	6	—	2	—	—	3	1	—	—	—	—	23
Haltwhistle ...	—	18	5	—	2	—	1	—	—	—	—	—	—	—	—	26
Hexham ...	1	17	—	—	25	1	3	4	11	12	5	1	2	—	—	82
Morpeth ...	4	14	6	1	8	—	4	4	2	34	16	—	—	—	—	93
Norham & Islandshires ...	—	5	—	2	4	—	1	—	3	1	6	—	—	—	—	22
Rothbury ...	—	3	5	—	14	—	—	—	3	5	2	—	—	—	—	32
Totals	228	696	184	37	899	18	61	41	188	771	351	16	6	1	1	3498

The attack rate per 1,000 population, for the administrative county was 8.58, for boroughs and urban districts 9.76, and for rural districts 5.18.

The following are the attack rates, per 1,000 population, of the under-mentioned infectious diseases, in each sanitary district in the administrative county :—

Sanitary Districts.	Small-pox.	Scarlet fever.	Diphtheria.	Enteric fever.	Puerperal fever.	Puerperal pyrexia.	Erysipelas.
<i>Municipal Boroughs.</i>							
Berwick	—	2.10	0.50	0.08	—	0.25	0.58
Blyth	3.98	0.81	0.34	0.03	0.09	0.06	0.47
Morpeth	1.25	1.11	0.13	0.13	—	—	—
Wallsend	0.11	2.25	0.33	0.04	0.04	0.24	0.60
<i>Urban Districts.</i>							
Alnwick	—	0.58	0.14	—	0.14	—	—
Amble	0.24	0.24	1.98	—	—	—	0.49
Ashington	0.20	1.92	0.07	0.17	0.03	0.27	0.68
Bedlingtonshire	0.32	1.45	0.21	0.17	0.07	0.14	0.53
Cramlington	—	1.96	0.23	—	—	—	0.23
Earsdon	0.23	1.32	1.01	0.07	—	0.15	0.54
Gosforth	0.61	1.65	0.24	0.43	—	0.12	0.43
Hexham	0.11	0.58	—	0.11	0.11	0.11	0.23
Longbenton	0.21	3.31	0.86	0.07	—	0.14	0.29
Newbiggin	0.14	5.19	—	0.14	—	0.56	0.98
Newburn	—	1.36	0.39	0.04	—	0.09	0.44
Prudhoe	—	3.52	0.21	0.10	0.10	—	0.32
Rothbury	—	—	—	—	—	0.83	1.67
Seaton Delaval	0.13	1.33	0.53	—	—	0.39	1.19
Seghill... ..	2.86	0.81	0.41	—	—	—	—
Weetslade	0.26	0.52	2.47	—	—	0.13	0.13
Whitley & Monkseaton	0.12	4.43	0.59	0.21	0.17	0.12	0.46
<i>Rural Districts.</i>							
Alnwick	2.46	0.39	1.03	—	0.07	—	0.15
Belford	—	—	—	—	—	—	0.63
Bellingham	—	3.67	0.91	—	0.18	—	0.18
Castle Ward	0.22	1.00	1.44	0.07	—	0.07	0.93
Glendale	0.12	1.11	0.12	—	—	0.24	—
Haltwhistle	—	2.01	0.56	—	—	0.11	—
Hexham	0.04	0.79	—	—	0.04	0.14	0.51
Morpeth	0.20	0.70	0.30	0.05	—	0.20	0.10
Norham & Islandshires	—	0.97	—	0.39	—	0.19	0.58
Rothbury	—	0.65	1.08	—	—	—	0.65

The highest attack rates were, it will be observed, as follows :—

Small-pox.—Blyth, 3.98 ; Seghill, 2.86 ; and Alnwick rural, 2.46.

Scarlet Fever.—Newbiggin, 5.19 ; Whitley & Monkseaton, 4.43 ; and Bellingham, 3.67.

Diphtheria.—Weetslade, 2.47 ; Amble, 1.98 ; and Castle Ward, 1.44.

Enteric Fever.—Gosforth, 0.43 ; Norham & Islandshires, 0.39 ; and Whitley & Monkseaton, 0.21.

Puerperal Fever.—Bellingham, 0.18 ; Whitley & Monkseaton, 0.17 ; and Alnwick urban, 0.14.

Puerperal Pyrexia.—Rothbury urban, 0.83 ; Newbiggin, 0.56 ; and Seaton Delaval, 0.39.

Erysipelas.—Rothbury urban, 1.67 ; Seaton Delaval, 1.19 ; and Newbiggin, 0.98.

ZYMOTIC DISEASES.

The Zymotic diseases which are generally notifiable are Small-pox, Scarletina, Diphtheria, Fevers (Typhus, Enteric. Continued and Relapsing). The seven principal Zymotic diseases, upon which the Zymotic death rate is calculated, are the four just mentioned, and in addition Whooping Cough, Measles, and Diarrhœa and Enteritis (under 2 years).

One hundred and seventeen deaths were caused by the seven principal Zymotic diseases, being an increase of one compared with the number registered in 1927. Of these 97 took place in the urban and 20 in the rural districts.

The Zymotic diseases which caused the greatest mortality were :—

Diseases.	Number of deaths.		
	1928.	1927.	1926.
Diarrhœa, etc. (under 2 years)	39	43	72
Whooping Cough... ..	38	14	108
Diphtheria	13	8	10

As Diarrhœa and Enteritis, Measles and Whooping Cough are not generally notifiable, no information can be given as to the number of cases which occurred.

The comparative rates for Zymotic diseases are set out in the following table :—

	Death Rate.	Increase since 1927.	Decrease since 1927.
Administrative County	0·28	0·01	—
Urban districts	0·31	—	0·05
Rural districts	0·19	0·07	—
England and Wales	0·40	0·02	—

Table shewing death rates, per 1,000 living, from each of the seven principal Zymotic diseases for the seven years ended Dec. 31st, 1928 :—

Diseases.	1922.	1923.	1924.	1925.	1926.	1927.	1928.
Small-pox	Nil.	Nil.	0·002	Nil.	0·002	0·004	Nil.
Scarlatina	0·032	0·037	0·017	0·019	0·038	0·026	0·022
Diphtheria	0·059	0·029	0·036	0·041	0·024	0·019	0·031
Enteric Fever	0·009	0·009	0·012	0·019	0·007	0·016	0·014
Measles	0·335	0·335	0·036	0·271	0·031	0·074	0·029
Whooping Cough	0·114	0·189	0·131	0·111	0·259	0·033	0·093
Diarrhœa&Enteritis (under 2 years)	0·127	0·224	0·219	0·266	0·173	0·103	0·095

Small-pox.—No deaths occurred from this disease during the year. Two hundred and twenty-eight notifications were received, an outbreak in the Borough of Blyth being chiefly responsible, 127 of the cases having been notified from that area.

Anthrax (in human subjects).—One case was reported from the urban district of Cramlington.

Typhus, Cholera, Plague.—No cases were reported.

Cerebro-spinal Meningitis.—One case was notified; one death was reported.

Poliomyelitis.—Six cases were notified; no deaths were reported.

Polio-encephalitis.—No cases were notified; one death occurred.

Chicken-pox was reported from 26 sanitary districts.

SCARLET FEVER.

The notifications numbered 696 (591 from urban and 105 from rural districts). The mortality from this disease was 9 (7 deaths occurring in urban and 2 in rural districts). In 1927, 11 deaths were reported, and in 1926, 16.

	Death rate per 1000 population.	Increase since 1927.	Decrease since 1927.	Attack rate per 1000 living.
Administrative County ...	0·022	—	0·004	1·70
Urban districts ...	0·023	—	0·005	1·95
Rural districts ...	0·019	—	—	1·00
England and Wales ...	0·015	—	—	2·61

The greatest number of cases occurred in Whitley & Monkseaton (104), and Wallsend (100).

ENTERIC FEVER.

Thirty-seven cases (33 from urban and 4 from rural districts) were notified, resulting in 6 deaths (5 occurring in urban and 1 in rural districts). In 1927 the mortality was 7, and in 1926, 3.

	Death rate per 1000 population.	Increase since 1927.	Decrease since 1927.	Attack rate per 1000 living.
Administrative County ...	0·014	—	0·002	0·090
Urban districts ...	0·016	0·001	—	0·108
Rural districts ...	0·009	—	0·010	0·038
England and Wales ...	0·011	0·002	—	0·09

The greatest number of cases occurred in the urban districts of Gosforth (7) and Ashington, Bedlingtonshire and Whitley & Monkseaton (5 each).

DIPHTHERIA AND MEMBRANOUS CROUP.

The notifications numbered 184 (129 from urban and 55 from rural districts). The diseases (one or both) were notified from 25 districts, i.e., from all districts except the urban districts of Hexham, Newbiggin and Rothbury, and the rural districts of Belford, Hexham and Norham & Islandshires.

Thirteen deaths occurred (9 in urban and 4 in rural districts); 8 deaths were reported in 1927 and 10 in 1926.

	Death rate per 1000 population.	Increase since 1927.	Decrease since 1927.	Attack rate per 1000 living.
Administrative County ...	0·031	0·012	—	0·45
Urban districts ...	0·029	0·010	—	0·42
Rural districts ...	0·038	0·019	—	0·52
England and Wales ...	0·081	0·011	—	1·55

MEASLES.

Twelve deaths occurred (8 in urban and 4 in rural districts); 31 deaths were reported in 1927 and 13 in 1926.

			Death rate per 1,000 population.	Increase since 1927.	Decrease since 1927.
Administrative County	...	...	0·029	—	0·045
Urban districts	...	...	0·026	—	0·066
Rural districts	...	...	0·037	0·018	—
England and Wales	...	...	0·109	0·017	—

WHOOPIING COUGH.

The deaths numbered 38 (34 in urban and 4 in rural districts); 14 deaths were reported in 1927 and 108 in 1926.

			Death rate per 1,000 population.	Increase since 1927.	Decrease since 1927.
Administrative County	...	...	0·093	0·060	—
Urban districts	...	...	0·112	0·074	—
Rural districts	...	...	0·038	0·019	—
England and Wales	...	...	0·075	—	0·019

PUERPERAL FEVER.

This disease caused 6 deaths (4 in urban and 2 in rural districts), compared with 12 in 1927 and 5 in 1926.

			Death rate per 1,000 population.	Increase since 1927.	Decrease 1927.
Administrative County	...	...	0·014	—	0·014
Urban districts	...	...	0·013	—	0·012
Rural districts	...	...	0·019	—	0·019

The distribution of the 6 deaths was as follows :—Blyth, 1; Wallsend, 1; Ashington, 1; Whitley and Monkseaton; 1; Hexham (rural), 1; and Rothbury (rural), 1.

DIARRHOEA AND ENTERITIS.

At all ages.

The number of deaths at all ages was 69 (56 in urban and 13 in rural districts). In 1927, 73 deaths occurred, and in 1926, 87.

			Death rate per 1,000 population.	Increase since 1927.	Decrease since 1927.
Administrative County	...	...	0·169	—	0·006
Urban districts	...	...	0·184	—	0·004
Rural districts	...	...	0·124	—	0·011

TABLE OF VITAL AND MORTALITY STATISTICS, &c., 1928.

[illegible]

Under 2 years.

The deaths from this cause, under 2 years of age, numbered 39 (43 in 1927, and 72 in 1926); 34 occurred in urban and 5 in rural districts.

			Death Rate per 1,000 births.	Increase since 1927.	Decrease since 1927.
Administrative County	...	...	5.2	—	0.5
Urban districts	...	...	5.8	1.6	—
Rural districts	...	...	3.1	—	8.2

RESPIRATORY DISEASES.

Respiratory diseases (exclusive of Respiratory Tuberculosis) caused 559 deaths in the administrative county during the year; 449 occurred in urban and 110 in rural districts. 709 deaths were reported during 1927 and 663 during 1926. The following table shews the comparative rates :—

			Death Rate per 1,000 population.	Increase since 1927.	Decrease since 1927.
Administrative County	...	...	1.37	—	0.33
Urban districts	...	...	1.48	—	0.35
Rural districts	...	...	1.05	—	0.25

INFLUENZA.

One hundred and sixteen deaths were recorded (83 in urban and 33 in rural districts) as directly attributable to this disease during the year. The deaths during 1927 numbered 195, and during 1926, 105. The following table indicates the comparative rates :—

			Death Rate per 1,000 population.	Increase since 1927.	Decrease since 1927.
Administrative County	...	..	0.28	—	0.18
Urban districts	...	...	0.27	—	0.19
Rural districts	...	...	0.31	—	0.16

TUBERCULOSIS.

Table 1.

Deaths and death rates.

	Respiratory Tuberculosis.				Other Tubercular Diseases.				Tuberculosis (all forms).			
	Deaths.	Death rates per 100,000 living.	Increase in rates since 1927.	Decrease in rates since 1927.	Deaths.	Death rates per 100,000 living.	Increase in rates since 1927.	Decrease in rates since 1927.	Deaths.	Death rates per 100,000 living.	Increase in rates since 1927.	Decrease in rates since 1927.
Administrative County	277	68	—	13	107	26	4	—	384	94	—	9
Urban districts ...	240	79	—	9	86	28	5	—	326	107	—	4
Rural districts ...	37	35	—	24	21	20	3	—	58	55	—	21
England and Wales ...	29809	76	—	3	6830	17	—	1	36639	93	—	4

Table 1 shews the number of deaths and the death rates per 100,000 living from all form of Tuberculosis. It will be noticed that in Respiratory Tuberculosis there is a decrease of 13 in the administrative county, 9 in the urban districts and 24 in the rural districts. In the other forms of Tuberculosis it will be observed that in every instance an increase in the rate is shewn in comparison with that for the previous year. For all forms of the disease the decrease in the administrative county is 9: in the urban districts 4; in the rural districts 21.

As indicated above, the death rate from all forms of Tuberculosis in the administrative county during 1928 was 94 per 100,000 persons living. Of the 384 deaths, 326 occurred in boroughs and urban districts (population 302,850) equivalent to a death rate of 107 per 100,000 living, and 58 in rural districts (population 104,450) corresponding to a death rate of 55 per 100,000 living. Among the sanitary districts in the administrative county the highest death rate per 100,000 living from Respiratory Tuberculosis was recorded in the municipal borough of Wallsend (144), and the lowest in Amble U.D., Rothbury U.D., and Norham & Islandshires R.D. (nil).

Table 2.
Deaths and death rates, 1900—1928.
Administrative County of Northumberland.

Year.	Respiratory Tuberculosis.		Other Tubercular Diseases.		Tuberculosis (all forms).		Total Deaths from all causes.	% of Deaths from Tuberculosis
	No. of Deaths.	Death rate per 100,000 living.	No. of Deaths.	Death rate per 100,000 living.	No. of Deaths.	Death rate per 100,000 living.		
*1900	537	138	244	62	781	200	6,822	11.4
*1901	495	125	280	71	775	196	7,261	10.6
*1902	498	125	240	60	738	185	6,605	11.1
*1903	485	119	323	79	808	198	6,826	11.8
*1904	490	117	317	76	807	193	7,131	11.3
1905	344	102	239	71	583	173	5,016	11.6
1906	362	104	208	60	570	164	5,026	11.3
1907	355	100	197	55	552	155	4,790	11.5
1908	344	95	220	60	564	155	5,377	10.5
1909	377	101	207	55	584	156	4,994	11.6
1910	355	93	225	60	580	153	4,917	11.7
1911	366	98	200	54	566	152	5,159	10.9
1912	328	86	193	50	521	136	4,861	10.7
1913	353	91	189	48	542	139	5,175	10.4
†1914	360	92	180	47	540	139	5,125	10.5
†1915	376	103	197	54	573	157	5,786	9.9
†1916	394	110	187	52	581	162	4,915	11.8
†1917	378	106	194	54	572	160	4,851	11.7
‡1918	434	122	164	46	598	168	6,129	9.7
1919	367	97	136	36	503	133	5,335	9.4
1920	363	92	144	37	507	129	5,072	9.9
1921	347	87	151	38	498	125	4,944	10.1
1922	355	88	127	31	482	119	5,113	9.4
1923	345	85	122	30	467	115	4,599	10.1
1924	337	82	126	31	463	113	4,951	9.3
1925	324	78	123	30	447	108	4,807	9.3
1926	303	73	120	29	423	102	4,735	8.9
1927	337	81	90	22	427	103	4,812	8.9
1928	277	68	107	26	384	94	4,642	8.3
Mean 1918-1927.	351	89	130	33	482	122	5,050	9.5

NOTES.—*Prior to 1905 Tynemouth U.D., Benwell and Walker were in County area.
†1914-1918 were "war" years.
‡1918 was the year of two severe epidemics of influenza.

Table 2 shews the deaths and death rates from 1900 to 1928 in the administrative county from Respiratory Tuberculosis, other tubercular diseases, and all forms, with the total number of deaths from all causes and the percentage of deaths due to tuberculous disease. It will be noted that the death rate per 100,000 living from all forms of Tuberculosis is 94, whilst in 1900 it was 200. The percentage of deaths from Tuberculosis in 1900 was 11.4 against 8.3 in 1928. It is necessary to emphasise that the total number of deaths in 1900 was 6,822, whilst in 1928 it was 4,642.

During the five years 1923-1927, the mean mortality rate from all forms of tubercular disease in the administrative county was 108; from Respiratory Tuberculosis the mean rate was 80, and from Tuberculosis (other forms) 28 per 100,000 living. In the preceding quinquennial period (1918-1922) the mean rates were—from Tuberculosis (all forms) 135, Respiratory 97, and other forms 38 per 100,000 living.

In the following table are indicated notifications and mortality, at specified age periods, during the year 1928.

Table 3.

Age Periods.	New Cases.		Deaths.	
	Pulmonary.	Non-pulmonary.	Pulmonary.	Non-pulmonary.
<i>Years.</i>				
0—1 ...	—	9	1	6
1—5 ...	18	59	10	27
5—15 ...	179	170	22	20
15—25 ...	216	63	79	20
25—45 ...	269	44	105	21
45—65 ...	87	8	57	10
65 and upwards	11	4	3	3
	780	357	277	107

Table 3 has been set out in compliance with the requirements of the Ministry of Health.

TABLE 4.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

SUMMARY OF NOTIFICATIONS DURING THE PERIOD FROM THE 1ST JANUARY, 1928, TO THE 29TH DECEMBER, 1928, IN THE COUNTY OF NORTHUMBERLAND.

Notifications on Form A.													
Age-periods.	Number of Primary Notifications.											Total Notifications on Form A.	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards.		Total Primary Notifications.
Pulmonary (Males) ...	—	10	54	42	58	42	68	54	35	15	6	384	426
" (Females) ...	—	8	42	33	50	66	94	53	30	7	5	388	422
Non-pulmonary (Males) ...	5	35	55	20	19	8	11	8	1	—	2	164	184
" (Females) ...	4	24	48	34	21	15	19	6	6	1	2	180	191
												1,116	

Age-periods.	Notifications on Form B.						Number of Notifications on Form C.		
	Number of Primary Notifications.						Total Notifications on Form B.		
	Under 5	5 to 10	10 to 15	15 to 20	20 to 25	Total Primary Notifications.	Poor Law Institutions.		Sanatoria.
Pulmonary (Males) ...	—	2	3	5		5	15		183
" (Females) ...	—	3	—	3		4	10		172
Non-pulmonary (Males) ...	—	3	2	5		5	3		27
" (Females) ...	—	6	2	8		9	2		22

Deaths from pulmonary and non-pulmonary tuberculosis.

83 cases of tuberculosis (39 pulmonary and 44 non-pulmonary) were not notified prior to death. Of this number 30 died in institutions, etc., outside the County.

This number (83) compares very favourably with the year 1927 when no fewer than 149 cases were unnotified.

ADMINISTRATION.

For convenience, the following data is given categorically in order to meet the requirements of the Ministry of Health :—

Public Health (Prevention of Tuberculosis) Regulations, 1925.—Following upon an application by the County Council, authority for enforcing these Regulations, within the area of the administrative county, was given to the County Council through the medium of the County of Buckingham (Prevention of Tuberculosis) Order, 1926. It was not found necessary to take any action under the Regulations during the year.

Public Health Act, 1925, Section 62.—No action was found to be necessary during the year.

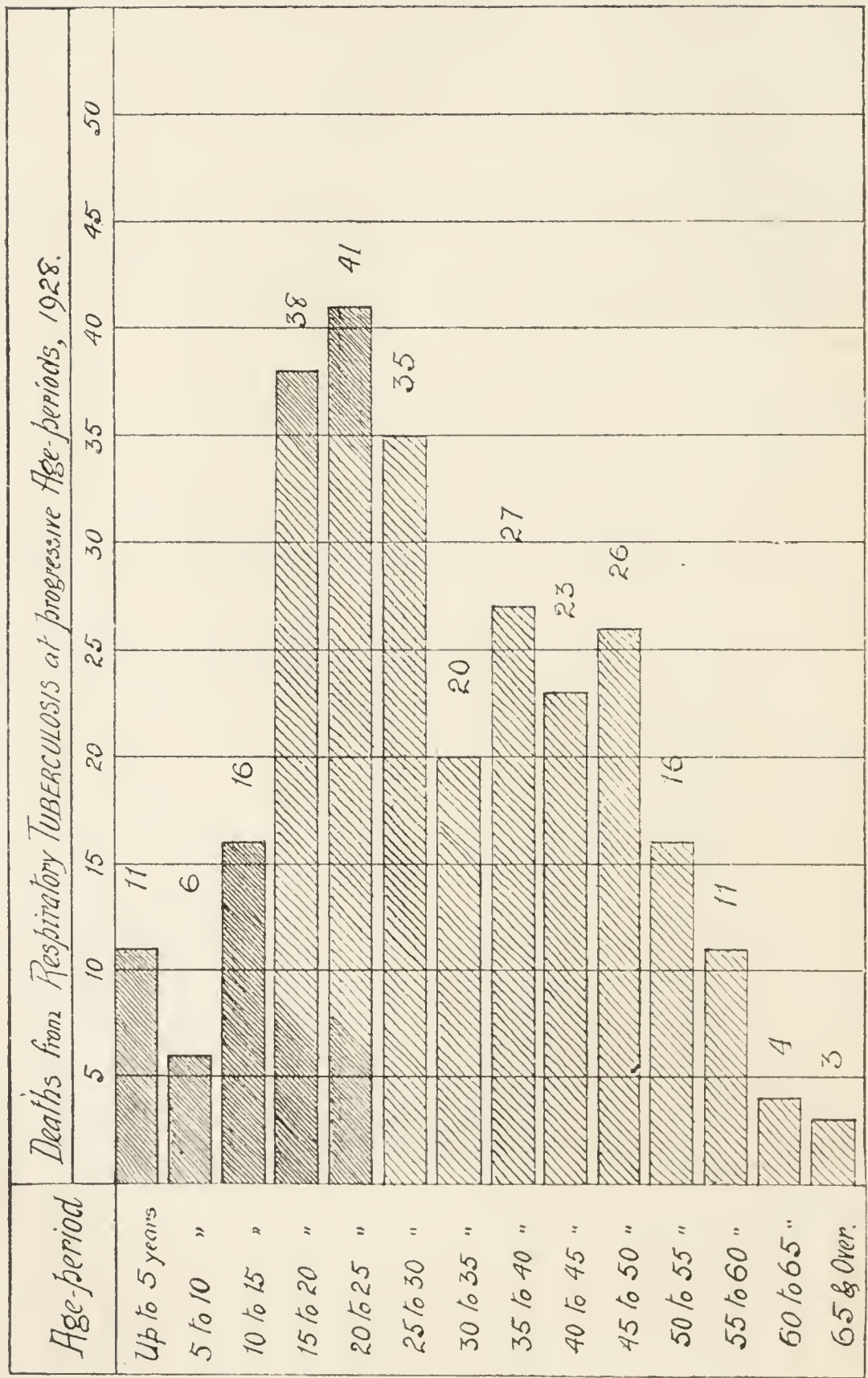
As previously indicated, the mean death rate from *Respiratory Tuberculosis* in the administrative county during the previous five years (1923—1927) is 80 per 100,000; this rate is greater than that recorded from all the deaths arising from the seven principal Zymotic diseases, which shewed a mean rate of only 0·52 per 100,000 during the same period.

TABLE 5.

INCIDENCE OF TUBERCULOSIS IN THE ADMINISTRATIVE COUNTY ACCORDING TO DISTRICTS.

DISTRICTS.	“ Live ” cases on Registers at com- mencement of year.			Number of Primary Notifications during year.			Deaths Registered during year.			“ Live ” cases on Registers at end of year.		
	Respir- atory.	Other forms.	Total	Respir- atory.	Other forms.	Total	Respir- atory.	Other forms.	Total	Respir- atory.	Other forms.	Total
<i>Municipal Boroughs.</i>												
Berwick-on-Tweed ...	26	20	46	17	7	24	11	3	14	32	24	56
Blyth ...	137	80	217	74	26	100	31	12	43	166	85	251
Morpeth ...	21	6	27	11	4	15	5	2	7	26	5	31
Wallsend...	301	165	466	153	75	228	64	18	82	389	220	609
<i>Urban Districts.</i>												
Alnwick ...	20	5	25	11	2	13	5	4	9	25	7	32
Amble ...	5	5	10	3	3	6	—	—	—	7	6	13
Ashington ...	133	57	190	65	26	91	29	7	36	141	56	197
Bedlingtonshire...	202	98	300	71	28	99	15	10	25	256	122	378
Cramlington ...	53	31	84	11	3	14	5	—	5	57	32	89
Earsdon ...	54	28	82	22	11	33	10	3	13	70	39	109
Gosforth ...	43	17	60	10	6	16	6	2	8	48	17	65
Hexham ...	124	9	133	29	5	34	8	—	8	146	14	160
Longbenton ...	27	13	40	21	9	30	9	—	9	28	17	45
Newbiggin-by-the-Sea ...	34	15	49	29	5	34	7	6	13	58	18	76
Newburn...	141	108	249	32	27	59	7	4	11	167	135	302
Prudhoe ...	117	51	168	51	32	83	6	5	11	142	63	205
Rothbury ...	—	1	1	1	—	1	—	2	2	—	—	—
Seaton Delaval ...	37	20	57	17	9	26	6	1	7	48	27	75
Seghill ...	3	1	4	2	—	2	1	—	1	2	1	3
Weetslade ...	43	31	74	10	14	24	4	2	6	52	44	96
Whitley & Monkseaton...	68	30	98	25	12	37	11	5	16	88	38	126
<i>Rural Districts.</i>												
Alnwick ...	25	10	35	17	7	24	6	6	12	37	13	50
Belford ...	7	8	15	3	—	3	2	—	2	8	8	16
Bellingham ...	21	2	23	8	1	9	3	2	5	26	3	29
Castle Ward ...	57	27	84	19	10	29	5	2	7	70	37	107
Glendale ...	6	8	14	3	1	4	3	2	5	8	8	16
Haltwhistle ...	27	4	31	6	1	7	6	—	6	31	5	36
Hexham ...	144	42	186	22	4	26	6	2	8	149	46	195
Morpeth ...	56	36	92	42	20	62	5	5	10	90	54	144
Norham & Islandshires...	9	5	14	2	5	7	—	—	—	8	10	18
Rothbury ...	4	2	6	3	1	4	1	2	3	5	1	6
TOTALS ...	1,945	935	2,880	790	354	1,144	277	107	384	2,380	1,155	3,535

COUNTY OF NORTHUMBERLAND. YEAR 1928.



Compiled from crude Returns supplied by Local Registrars, the official groups supplied by the Registrar General being too large and unequal to furnish useful comparison.

TREATMENT OF TUBERCULOSIS.

The undermentioned consolidated return shews the work of all dispensaries during the year 1928; succeeding Tables give an outline of the work of individual dispensaries. It will be observed that of 1,462 new cases (including contacts) examined, 586 were definitely tuberculous, 7 cases were written off the dispensary registers as cured, 127 died, and at the end of the year 1,918 definite cases were on the dispensary registers.

TUBERCULOSIS SCHEME
OF THE NORTHUMBERLAND COUNTY COUNCIL.

RETURN SHEWING THE WORK OF THE DISPENSARIES DURING THE YEAR 1928.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—NEW CASES examined during the year (excluding contacts):												
(a) Definitely tuberculous ...	158	162	49	48	13	13	45	32	171	175	94	80
(b) Doubtfully tuberculous ...	—	—	—	—	—	—	—	—	52	32	44	47
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	75	56	72	100
B.—CONTACTS examined during the year:—												
(a) Definitely tuberculous ...	19	17	11	8	—	—	5	6	19	17	16	14
(b) Doubtfully tuberculous ...	—	—	—	—	—	—	—	—	8	8	19	10
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	32	67	121	143
C.—CASES written off the Dispensary Register as												
(a) Cured ...	—	1	2	—	—	1	1	2	—	2	3	2
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error) ...	—	—	—	—	—	—	—	—	168	145	257	283
D.—NUMBER OF PERSONS on Dispensary Register on December 31st:—												
(a) Diagnosis completed ...	580	499	221	239	20	27	183	149	600	526	404	388
(b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	16	17	28	19

Number of persons on Dispensary Register on January 1st...	1,682
Number of patients transferred from other areas and of "lost sight of" cases returned ...	56
Number of patients transferred to other areas and cases "lost sight of" ...	225
Died during the year ...	127
Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months...	49
Number of attendances at the Dispensary (including contacts) ...	4,356
Number of consultations with Medical Practitioners:—	
(a) At homes of applicants ...	202
(b) Otherwise ...	1,520
Number of other visits by Tuberculosis Officers to homes ...	357

Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	12,732
Number of specimens of Sputum, &c., examined	945
Number of insured persons on Dispensary Register on the 31st December	662
Number of insured persons under Domiciliary Treatment on the 31st December	262
Number of reports received during the year in respect of insured persons :—	
(a) Form G.P. 17	19
(b) Form G.P. 36	549
Cases written off in a previous year as “cured” which have again been entered on Register as <i>New Cases</i>	Nil.

RETURN SHEWING THE WORK OF THE WALLSEND DISPENSARY
DURING THE YEAR 1928.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous	138	42	180
(b) Doubtfully tuberculous	—	—	59
(c) Non-tuberculous... ..	—	—	83
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	15	2	17
(b) Doubtfully tuberculous	—	—	26
(c) Non-tuberculous... ..	—	—	142
C.—CASES written off the Dispensary Register as :—			
(a) Cured	2	4	6
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)... ..	—	—	294
D.—NUMBER OF PERSONS on Dispensary Register on December 31st :—			
(a) Diagnosis completed	480	114	594
(b) Diagnosis not completed	—	—	13

Number of persons on Dispensary Register on January 1st... ..	501
Number of patients transferred from other areas and of “lost sight of” cases returned	16
Number of patients transferred to other areas and cases “lost sight of”	64
Died during the year	53
Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months	10
Number of attendances at the Dispensary (including contacts) ...	1,408

RETURN SHEWING THE WORK OF THE BLYTH DISPENSARY
DURING THE YEAR 1928.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous	80	13	93
(b) Doubtfully tuberculous	—	—	22
(c) Non-tuberculous... ..	—	—	68
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	10	2	12
(b) Doubtfully tuberculous	—	—	1
(c) Non-tuberculous... ..	—	—	83
C.—CASES written off the Dispensary Register as :—			
(a) Cured	—	—	—
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)...	—	—	161
D.—NUMBER OF PERSONS on Dispensary Register on December 31st :—			
(a) Diagnosis completed	195	46	241
(b) Diagnosis not completed	—	—	5

Number of persons on Dispensary Register on January 1st...	197
Number of patients transferred from other areas and of "lost sight of" cases returned	7
Number of patients transferred to other areas and cases "lost sight of"	52
Died during the year	24
Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months	10
Number of attendances at the Dispensary (including contacts) ...	741

RETURN SHEWING THE WORK OF THE HEXHAM DISPENSARY
DURING THE YEAR 1928.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous	59	11	70
(b) Doubtfully tuberculous	—	—	64
(c) Non-tuberculous... ..	—	—	24
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	8	1	9
(b) Doubtfully tuberculous	—	—	15
(c) Non-tuberculous... ..	—	—	25

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
C.—CASES written off the Dispensary Register as :—			
(a) Cured	1	—	1
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)...	—	—	62
D.—NUMBER OF PERSONS on Dispensary Register on December 31st :—			
(a) Diagnosis completed	314	30	344
(b) Diagnosis not completed	—	—	32

Number of persons on Dispensary Register on January 1st...	308
Number of patients transferred from other areas and of "lost sight of" cases returned	19
Number of patients transferred to other areas and cases "lost sight of"	85
Died during the year	10
Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months	21
Number of attendances at the Dispensary (including contacts) ...	570

RETURN SHEWING THE WORK OF THE NEWBURN DISPENSARY
DURING THE YEAR 1928.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous	25	14	39
(b) Doubtfully tuberculous	—	—	14
(c) Non-tuberculous... ..	—	—	3
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	4	5	9
(b) Doubtfully tuberculous	—	—	3
(c) Non-tuberculous... ..	—	—	22
C.—CASES written off the Dispensary Register as :—			
(a) Cured	—	—	—
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)...	—	—	30
D.—NUMBER OF PERSONS on Dispensary Register on December 31st :—			
(a) Diagnosis completed	115	85	200
(b) Diagnosis not completed	—	—	14

Number of persons on Dispensary Register on January 1st...	...	169
Number of patients transferred from other areas and of "lost sight of" cases returned	... ..	3
Number of patients transferred to other areas and cases "lost sight of"	... ..	12
Died during the year	... ..	6
Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months	... ..	8
Number of attendances at the Dispensary (including contacts)	...	414

RETURN SHEWING THE WORK OF THE ASHINGTON DISPENSARY
DURING THE YEAR 1928.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts):—			
(a) Definitely tuberculous	115	23	138
(b) Doubtfully tuberculous	—	—	16
(c) Non-tuberculous... ..	—	—	125
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	18	1	19
(b) Doubtfully tuberculous	—	—	—
(c) Non-tuberculous... ..	—	—	91
C.—CASES written off the Dispensary Register as:—			
(a) Cured	—	—	—
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)...	—	—	306
D.—NUMBER OF PERSONS on Dispensary Register on December 31st:—			
(a) Diagnosis completed	435	104	539
(b) Diagnosis not completed	—	—	—

Number of persons on Dispensary Register on January 1st...	...	507
Number of patients transferred from other areas and of "lost sight of" cases returned	... ..	11
Number of patients transferred to other areas and cases "lost sight of"	... ..	12
Died during the year	... ..	34
Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months	... ..
Number of attendances at the Dispensary (including contacts)	...	1,223

RESIDENTIAL INSTITUTIONS.

AVERAGE NUMBER OF BEDS AVAILABLE FOR PATIENTS
DURING THE YEAR 1928.

	Observa- tion.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total.
		"Sana- torium" Beds	"Hospital" Beds	Disease of Bones and Joints.	Other Conditions.	
Adult Males ...	8	78	20	—	2	108
Adult Females ...	8	42	20	—	2	72
Children under 15 ...	8	57	—	27	22	114
TOTAL...	24	177	40	27	26	294

RETURN SHEWING THE EXTENT OF RESIDENTIAL TREATMENT
DURING THE YEAR 1928.

			In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
Number of Patients	Ad'ts	M.	107	204	202	14	95
		F.	71	168	170	7	62
	Chil- dren.	M.	54	119	110	1	62
		F.	51	94	94	—	51
Number of Observation Cases	Ad'ts	M.	—	20	10	—	10
		F.	—	14	6	—	8
	Chil- dren.	M.	5	30	34	—	1
		F.	1	28	28	—	1
	TOTAL		289	677	654	22	290

RETURN SHEWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS*
AND OF OBSERVATION OF DOUBTFUL CASES DISCHARGED FROM
RESIDENTIAL INSTITUTIONS DURING THE YEAR 1928.

Classification on admission to the Institution.				Duration of Residential Treatment in the Institution.																	
				Condition at time of discharge.			Under 3 months.			3—6 months.			6—12 months.			More than 12 months.			TOTAL.		
							M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.			
PULMONARY TUBERCULOSIS.				Class T.B. minus.				Quiescent... ..	3	6	21	31	38	54	32	14	23	15	2	5	244
								Improved... ..	10	20	—	12	6	1	8	2	8	3	1	4	75
								No material improvement	6	1	—	—	—	—	—	—	—	—	—	—	7
								Died in Institution ...	2	—	1	—	—	—	—	—	—	—	—	—	3
				Class T.B. plus Group 1.				Quiescent... ..	—	—	—	1	4	2	—	5	—	—	1	—	13
								Improved... ..	—	1	—	—	3	—	—	1	—	—	—	1	6
								No material improvement	—	—	—	—	—	—	—	—	—	—	—	—	—
								Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—
				Class T.B. plus Group 2.				Quiescent... ..	—	—	—	3	3	—	3	—	1	1	—	—	11
								Improved... ..	6	5	—	17	15	—	20	16	1	6	5	3	94
								No material improvement	3	2	1	2	3	—	3	5	—	—	1	—	20
								Died in Institution ...	1	—	—	—	—	—	—	—	—	—	—	—	1
				Class T.B. plus Group 3.				Quiescent... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
								Improved... ..	—	—	—	1	—	—	—	1	—	—	—	—	2
								No material improvement	8	5	1	5	1	1	—	—	1	—	—	—	22
								Died in Institution ...	7	4	—	2	3	—	2	—	—	—	—	—	18
NON-PULMONARY TUBERCULOSIS.				Bones and Joints.				Quiescent or Arrested ...	—	—	1	—	—	1	1	—	2	—	—	4	9
								Improved... ..	—	—	1	—	—	—	—	—	—	—	—	3	4
								No material improvement	—	—	—	—	—	—	—	—	1	—	—	—	1
								Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—
				Abdominal.				Quiescent or Arrested ...	—	—	11	—	—	19	—	—	10	—	—	1	41
								Improved... ..	—	2	2	—	1	3	—	—	6	—	—	—	14
								No material improvement	1	—	—	—	—	—	—	—	1	—	—	—	2
								Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—
				Other Organs.				Quiescent or Arrested ...	—	—	—	—	—	—	—	—	—	—	—	—	—
								Improved... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
								No material improvement	—	—	—	—	—	—	—	—	1	—	—	—	1
								Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—
				Peripheral Glands.				Quiescent or Arrested ...	—	—	2	—	—	4	—	—	3	—	—	—	9
								Improved... ..	—	—	—	1	—	—	—	—	—	—	—	—	1
								No material improvement	—	—	—	—	—	—	—	—	—	—	—	—	—
								Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—
				Under 1 wk.			1—2 weeks.			2—4 weeks.			More than 4 weeks.								
Observation for purpose of diagnosis.				Tuberculous	—	—	—	—	—	—	4	1	7	1	—	12	25				
				Non-tuberculous... ..	—	—	—	—	—	—	—	2	3	5	3	31	44				
				Doubtful	—	—	—	—	—	—	—	—	—	—	—	9	9				

* It should be borne in mind that the definition of "patient" does not include persons in whom a definite diagnosis of tuberculosis has not been made.

REPORT OF THE MEDICAL SUPERINTENDENT,
WOOLEY SANATORIUM,
FOR THE YEAR ENDED 31ST DECEMBER, 1928.

The annual report of an institution for the treatment of Pulmonary Tuberculosis necessarily involves a certain amount of repetition.

As usual the immediate results of treatment were good in the majority of cases, and as usual it is to be feared that many of those who were discharged as "improved" will sooner or later relapse on returning to their previous habits and surroundings.

During the year 403 cases were discharged from the institution classified as follows :—

Quiescent	...	...	...	...	...	163
Improved	...	...	...	...	...	163
No material improvement			...	...	...	46
Died	...	...	...	...	...	21
Non-Tuberculous...		...	...	...	...	10

It will be seen from the above table that while 163 were considered to be quiescent on discharge, 67, or roughly one-sixth of the total shewed "no material improvement" or actually died in the institution.

Emphasis is placed on this figure in view of the opportunities which the Local Government Act may afford in the near future for making some provision for such cases elsewhere. It is hoped that beds will be available in the local institutions in the different areas for advanced cases. Various reasons can be advanced for this policy.

- (1). Such cases are better in a hospital within easy reach of their relatives.
- (2). There is no special point in subjecting them to the rigours of winter at Wooley.
- (3). An excessive number in the Sanatorium proper tends to damage its prestige as a curative institution.

It is not suggested that provision should be made for all advanced cases. Many of them prefer the accustomed comforts of their own homes, and if the conditions are suitable and the necessary precautions are taken there is little risk of grown-ups contracting the disease.

There is, however, a considerable danger of infection in the case of young children when there is an open case of Pulmonary Tuberculosis in the house, and this danger is greatest, as will be readily appreciated, when the mother is the victim.

It is unfortunately this class of patient who most frequently terminates her period of sanatorium treatment prematurely owing to domestic difficulties. The reason is not far to seek. Relatives and friends find the care of other people's children burdensome, particularly when the patient in question has the appearance of rude health characteristic of most sanatorium convalescents.

Some interesting work has been done recently in the County of Lancashire on the fate of young children in tuberculous households. It was shewn that the death rate from non-Pulmonary Tuberculosis in children under five years in households with a sputum positive case was considerably higher than normal. The death rate was nine times higher in the age group 0-1, fourteen times in the age group 1-2, and nineteen times in the age group 2-5. The principal cause of death was Tuberculous Meningitis which accounted for two-thirds of the total.

The danger of infection is not nearly so great in the case of adults. Even in the case of husband and wife, the mortality is only slightly higher than normal among the partners exposed to innumerable chances of infection and some of this increase may possibly be attributed to assortive mating.

Average duration of stay.

The average period of treatment compared with previous years was as follows :—

	1923-24.	1924-25.	1925-26.	1927.	1928.
M. ...	189.6	167.1	183.3	177.3	183.01
F. ...	145.8	149.9	151.5	156.1	151.84

It will be noted that the male average invariably exceeds the female.

Waiting List.

The full number of beds, 180, have been practically all occupied throughout the period, the average being 178.18.

The waiting list is liable to fluctuate, but the number awaiting admission has never been high. It is very desirable for patients to be admitted as soon as possible after notification. Priority has been given to early cases and to acute cases where the home conditions were unfavourable.

Treatment.

Treatment has been conducted on the usual lines of rest, good food, graduated exercise and occupational therapy. Strict adherence to the routine is regarded as highly important.

Individual advice is supplemented by lectures when the importance of sputum disinfection and the examination of contacts at the dispensaries is emphasised. With few exceptions patients are very anxious to co-operate on the preventive side.

As explained in previous reports, the physical and psychological benefits of purposive occupation while undergoing treatment are considerable. The object of treatment is to restore working capacity to as high a degree as possible, and the various departments of the Settlement are a great boon to the institution in this respect. One marked feature has been the growing popularity of gardening as an occupation of choice, and the results, under the capable direction of the head gardener, have made a vast improvement in the amenities of the institution. Untidy surroundings lead to untidy and slovenly habits, a bad object lesson to consumptives who should be taught the special importance of strict personal hygiene. The mental effect of beautiful surroundings cannot be estimated.

Artificial Pneumothorax.

This form of treatment is perhaps the most dramatic advance in the treatment of Pulmonary Tuberculosis since Sanatorium principles were established.

It consists of inducing collapse of the affected lung by introducing air with a special apparatus into the pleural cavity. The beneficial effects are believed to be due to several factors.

- (1). The diseased area is reduced enormously in size.
- (2). The damaged lung is to a large degree put to rest.
- (3). The absorption of toxins is considerably lessened by pressure on the lymphatic vessels and by compression of the diseased areas.

The case of J.J., aged 23, is a striking illustrative example. This man was admitted on the 16th August, 1927, with very active disease involving practically the whole of his left lung. On complete rest under sanatorium conditions he was gradually retrogressing. He had the young adult type of Pulmonary Tuberculosis which is usually a very fatal form of the disease. Collapse was induced with very satisfactory results. His condition steadily improved from that date, and he is now earning his living as a settler in the woodwork department. Collapse is maintained by refills at intervals for several years and patients attend at Wooley for the necessary refills after discharge.

Unfortunately this form of treatment is not generally applicable. The disease is very frequently bilateral and the condition of the opposite lung must be carefully considered. The presence of extensive pleural adhesions, also, may interfere with a satisfactory collapse. Every case of active disease is considered for this form of treatment which appears to offer the greatest hope for certain advanced cases.

Sanocrysin.

This so-called "gold treatment" was recently introduced from Denmark and consists in the injection into the veins of a gold compound, viz., the double theosulphate of gold and sodium. It was originally stated that this salt acted as a specific in that it attacked the under-lying cause of the disease by killing the tubercle bacillus in the tissues. Consequently large doses were considered necessary, and while striking results were claimed by the originators, it was admitted that disasters sometimes occurred and that complications, such as gastro-enteritis, skin rashes, albumen in the urine and fever were frequent. It has been doubted whether the drug acts in the manner suggested and smaller doses are now considered advisable. A series of cases has been treated by this method, and while it is too early to speak with any confidence as to the ultimate results, the patients treated certainly gained weight, the quantity of sputum was definitely reduced and in some the bacilli disappeared from the sputum.

It is proposed to continue this form of treatment in selected cases and a further report will be submitted in due course. No untoward results have been experienced.

X-Ray.

The existing old-fashioned screening apparatus has been in regular use, but the results cannot be said to be satisfactory. Provision has been made in the estimates for the installation of an up-to-date apparatus, which can be used for screening the chest or for the taking of photographs. This is a real necessity in a modern institution.

Laboratory.

Repeated examination of the sputum is carried out as a routine measure and other examinations are made as occasion arises. For special bacteriological work which cannot be done on the spot, material is sent to the County Bacteriologist.

Complications.

The following complications have been noted :—

<i>Tuberculous.</i>				<i>Non-Tuberculous.</i>			
Addisons disease...	...	1		Gallstones ...	...	...	1
Laryngitis ...	...	10		Asthma ...	...	...	3
Pericarditis ...	...	1		Silicosis ...	...	...	1
Peritonitis ...	...	1		Valvular disease of Heart...	...	...	3
Intestinal Ulceration ...	...	6		Bronchiectasis ...	...	...	2
				Syphilis ...	...	...	1
				Pregnancy ...	...	...	5

Discipline.

The discipline of the patients has been very good. There have been relatively few dismissals for breaches of discipline and the number of patients leaving against advice has not been large. The chief reason for such departures has been domestic difficulties. Generally speaking patients are anxious to remain for a reasonable period, and the opposite type who is very reluctant to leave the Sanatorium is not uncommon.

The Assistant Medical Superintendent, J. R. Paterson, M.B., Ch.B., resigned his appointment on the 19th September, 1928, having been appointed to the Winter Street Hospital, Sheffield. W. Ferguson, M.B.,

AFTER-HISTORY OF TUBERCULOUS PATIENTS.

The following tables indicate the present condition of patients who applied for treatment in 1919 to 1923.

TABLE GIVING CLASSIFICATION AT THE TIME OF FIRST EXAMINATION
AND PRESENT CONDITION OF PATIENTS APPLYING
FOR TREATMENT IN 1919.

Adults.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, working or fit to work.	Improved or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male ...	Stage I. (Early) ...	11	10	—	—	—	1	11
Female ...	Do. ...	34	15	6	—	2	11	34
Ex-servicemen	Do. ...	46	18	9	—	11	8	46
Male ...	Stage II. (Intermediate) ...	31	4	2	1	21	3	31
Female ...	Do. ...	30	3	3	—	21	3	30
Ex-servicemen	Do. ...	77	9	12	2	44	10	77
Male ...	Stage III. (Advanced) ...	11	—	—	—	11	—	11
Female ...	Do. ...	16	—	—	—	16	—	16
Ex-servicemen	Do. ...	11	—	—	—	10	1	11
Male ...	Surgical ...	2	2	—	—	—	—	2
Female ...	Do. ...	1	—	—	—	1	—	1
Ex-servicemen	Do. ...	—	—	—	—	—	—	—
Totals ...		270	61	32	3	137	37	270
Percentages ...			22.6	11.9	1.1	50.7	13.7	

Children.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, working or fit to work.	Improved or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male ...	Pulmonary ...	32	16	2	—	11	3	32
Female ...	Do. ...	30	13	2	—	11	4	30
Male ...	Surgical ...	8	4	2	—	1	1	8
Female ...	Do. ...	13	8	1	—	2	2	13
Male ...	Glands ...	9	6	1	—	1	1	9
Female ...	Do. ...	11	3	3	—	2	3	11
Totals ...		103	50	11	—	28	14	103
Percentages ...			48.5	10.7	—	27.2	13.6	

TABLE GIVING CLASSIFICATION AT THE TIME OF FIRST EXAMINATION
AND PRESENT CONDITION OF PATIENTS APPLYING
FOR TREATMENT IN 1920.

Adults.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, or working, or fit to work.	Improved, or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male	Stage I. (Early)	15	8	2	—	4	1	15
Female		18	8	1	—	4	5	18
Ex-service men		47	21	12	—	4	10	47
Male	Stage II. (Inter- mediate)	34	6	1	1	24	2	34
Female		34	4	2	—	24	4	34
Ex-service men		83	17	16	1	38	11	83
Male	Stage III. (Advanced)	8	—	—	—	8	—	8
Female		22	—	—	—	21	1	22
Ex-service men		17	—	—	—	17	—	17
	Totals ...	278	64	34	2	144	34	278
	Percentages		23.0	12.2	0.8	51.8	12.2	

Children.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, or working, or fit to work.	Improved, or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male	Pulmonary ...	20	13	2	—	3	2	20
Female		34	16	5	—	10	3	34
Male	Surgical ...	17	7	3	—	2	5	17
Female		14	9	3	—	—	2	14
Male	Glands ...	9	6	—	—	2	1	9
Female		7	6	—	—	1	—	7
Female	Skin	1	1	—	—	—	—	1
	Totals ...	102	58	13	—	18	13	102
	Percentages		56.9	12.7	—	17.7	12.7	

TABLE GIVING CLASSIFICATION AT THE TIME OF FIRST EXAMINATION
AND PRESENT CONDITION OF PATIENTS APPLYING
FOR TREATMENT IN 1921.

Adults.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, working, or fit to work.	Improved, or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male	Stage I. (Early)	11	7	1	—	3	—	11
Female		22	12	4	—	2	4	22
Ex-service men		25	16	5	—	1	3	25
Male	Stage II. (Intermediate)	28	3	—	—	21	4	28
Female		38	6	2	—	30	—	38
Ex-service men		34	7	4	—	15	8	34
Male	Stage III. (Advanced)	10	—	—	—	10	—	10
Female		14	—	—	—	14	—	14
Ex-service men		13	—	—	—	12	1	13
Male	Surgical ...	1	—	—	—	1	—	1
Female		3	—	1	—	2	—	3
Ex-service men		3	—	3	—	—	—	3
	Totals ...	202	51	20	—	111	20	202
	Percentage		25.3	9.9	—	54.9	9.9	

Children.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, working, or fit to work.	Improved, or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male	Pulmonary ...	34	21	4	—	8	1	34
Female		31	10	3	—	16	2	31
Male	Surgical ...	17	9	4	—	2	2	17
Female		7	4	—	—	1	2	7
Male	Glands ...	6	6	—	—	—	—	6
Female		10	8	—	—	—	2	10
Male	Skin	1	—	—	—	—	1	1
Female		2	1	—	—	—	1	2
Male	Miliary ...	2	—	1	—	1	—	2
Female		1	—	—	—	1	—	1
	Totals ...	111	59	12	—	29	11	111
	Percentages		53.2	10.8	—	26.1	9.9	

TABLE GIVING CLASSIFICATION AT THE TIME OF FIRST EXAMINATION
AND PRESENT CONDITION OF PATIENTS APPLYING
FOR TREATMENT IN 1922.

Adults.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, or working, or fit to work.	Improved, or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male	Stage I. (Early)	20	11	1	—	5	3	20
Female		7	3	—	—	1	3	7
Ex-service men		11	4	1	—	3	3	11
Male	Stage II. (Inter- mediate)	40	10	4	—	21	5	40
Female		40	9	2	—	24	5	40
Ex-service men		21	3	—	—	11	7	21
Male	Stage III. (Advanced)	16	—	—	—	15	1	16
Female		16	—	—	—	14	2	16
Ex-service men		5	—	—	—	5	—	5
Male	Surgical ...	4	2	—	—	2	—	4
Female		2	2	—	—	—	—	2
Ex-service men		6	2	2	—	2	—	6
	Totals ...	188	46	10	—	103	29	188
	Percentages		24.5	5.3	—	54.8	15.4	

Children.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, or working, or fit to work.	Improved, or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male	Pulmonary ...	22	16	1	—	4	1	22
Female		25	12	5	—	7	1	25
Male	Surgical ...	20	17	1	—	1	1	20
Female		16	9	4	—	1	2	16
Male	Glands ...	17	12	2	—	1	2	17
Female		13	11	1	—	1	—	13
Female	Skin	1	1	—	—	—	—	1
Male	Miliary ...	1	—	1	—	—	—	1
Female		2	—	1	—	1	—	2
	Totals ...	117	78	16	—	16	7	117
	Percentages		66.6	13.7	—	13.7	6.0	

TABLE GIVING CLASSIFICATION AT THE TIME OF FIRST EXAMINATION
AND PRESENT CONDITION OF PATIENTS APPLYING
FOR TREATMENT IN 1923.

Adults.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, or working, or fit to work.	Improved, or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male	Stage I. (Early)	24	11	1	2	9	1	24
Female		29	9	2	1	10	7	29
Ex-service men		10	2	4	—	3	1	10
Male	Stage II. (Inter- mediate)	49	14	4	—	30	1	49
Female		64	9	4	1	43	7	64
Ex-service men		23	4	2	—	13	4	23
Male	Stage III. (Advanced)	12	—	—	—	12	—	12
Female		13	—	—	—	13	—	13
Ex-service men		3	—	—	—	3	—	3
Male	Surgical ...	5	1	2	—	2	—	5
Female		3	1	2	—	—	—	3
Ex-service men		—	—	—	—	—	—	—
	Totals ...	235	51	21	4	138	21	235
	Percentages ...		21.7	8.9	1.7	58.8	8.9	

Children.

Sex.	Classification.	No. of applicants.	Present Condition.					Total.
			Well, or working, or fit to work.	Improved, or moderately well.	Relapsed.	Dead.	Lost sight of or left the district.	
Male	Pulmonary ...	39	25	7	1	4	2	39
Female		31	13	3	—	13	2	31
Male	Surgical ...	11	8	2	—	1	—	11
Female		15	13	2	—	—	—	15
Male	Glands ...	7	7	—	—	—	—	7
Female		6	5	—	—	—	1	6
Male	Miliary ...	—	—	—	—	—	—	—
Female		3	1	—	—	2	—	3
	Totals ...	112	72	14	1	20	5	112
	Percentages ...		64.3	12.5	0.8	17.9	4.5	

Table X.

SUMMARY INDICATING THE CONDITION IN SUBSEQUENT YEARS OF CASES OF
TUBERCULOSIS EXAMINED IN 1919 TO 1923 INCLUSIVE.

Adults.

Year examined.	Number examined.	Condition in the years 1924, 1925, 1926, 1927 and 1928.										
		Year.	Well and working.		Moderately well.		Relapsed.		Dead.		Lost sight of or left district.	
			No.	%	No.	%	No.	%	No.	%	No.	%
1919	270	1924	66	24.4	41	15.2	12	4.4	116	42.9	35	12.9
		1925	57	21.1	51	18.8	8	2.9	121	44.8	33	12.2
		1926	55	20.4	40	14.8	8	2.9	131	48.5	36	13.3
		1927	48	17.8	43	15.9	5	1.9	136	50.4	38	14.0
		1928	61	22.6	32	11.9	3	1.1	137	50.7	37	13.7
1920	278	1924	38	13.7	71	25.5	12	4.3	121	43.5	36	13.0
		1925	52	18.7	62	22.3	10	3.6	127	45.7	27	9.7
		1926	59	21.2	40	14.4	13	4.7	134	48.2	32	11.5
		1927	55	19.8	40	14.4	4	1.4	143	51.4	36	13.0
		1928	64	23.0	34	12.2	2	0.8	144	51.8	34	12.2
1921	202	1924	34	16.8	50	24.7	15	7.4	90	44.5	13	6.4
		1925	37	18.3	44	21.8	9	4.4	97	48.0	15	7.4
		1926	44	21.8	29	14.3	4	1.9	107	52.9	18	8.9
		1927	49	24.3	21	10.4	3	1.5	111	54.9	18	8.9
		1928	51	25.3	20	9.9	—	—	111	54.9	20	9.9
1922	188	1924	38	20.2	38	20.2	14	7.4	80	42.5	18	9.5
		1925	33	17.5	42	22.3	6	3.3	84	44.6	23	12.3
		1926	41	21.8	23	12.2	2	1.1	96	51.1	26	13.8
		1927	40	21.3	16	8.5	—	—	102	54.2	30	16.0
		1928	46	24.5	10	5.3	—	—	103	54.8	29	15.4
1923	235	1928	51	21.7	21	8.9	4	1.7	138	58.8	21	8.9

Table Y.
Children.

Year examined.	Number examined.	Condition in the years 1924, 1925, 1926, 1927, and 1928.										
		Year.	Well or fit to work.		Moderately well.		Relapsed.		Dead.		Lost sight of or left district.	
			No.	%	No.	%	No.	%	No.	%	No.	%
1919	103	1924	53	51.4	6	5.8	8	7.8	26	25.2	10	9.7
		1925	43	41.7	17	16.5	6	5.8	26	25.2	11	10.6
		1926	39	37.9	23	22.3	1	0.9	27	26.2	13	12.6
		1927	51	49.5	9	8.7	—	—	27	26.2	16	15.6
		1928	50	48.5	11	10.7	—	—	28	27.2	14	13.6
1920	102	1924	41	40.2	26	25.5	4	3.9	15	14.7	16	15.7
		1925	47	46.1	16	15.1	5	4.9	17	16.7	17	16.7
		1926	48	47.0	18	17.6	2	1.9	17	16.7	17	16.7
		1927	52	51.0	20	19.6	—	—	17	16.7	13	12.7
		1928	58	56.9	13	12.7	—	—	18	17.7	13	12.7
1921	111	1924	48	43.2	22	19.8	7	6.3	27	24.3	7	6.3
		1925	37	33.3	35	31.5	6	5.4	27	24.3	6	5.4
		1926	51	45.9	20	18.0	5	4.5	27	24.3	8	7.2
		1927	59	53.2	14	12.6	—	—	27	24.3	11	9.9
		1928	59	53.2	12	10.8	—	—	29	26.1	11	9.9
1922	117	1924	48	41.0	47	40.2	5	4.3	13	11.1	4	3.4
		1925	53	45.3	38	32.5	5	4.3	15	12.8	6	5.1
		1926	71	60.7	23	19.7	4	3.4	15	12.8	4	3.4
		1927	72	61.5	21	17.9	1	0.9	16	13.7	7	6.0
		1928	78	66.6	16	13.7	—	—	16	13.7	7	6.0
1923	112	1928	72	64.3	14	12.5	1	0.8	20	17.9	5	4.5

MILK AND DAIRIES ACTS AND ORDERS.

Under the provisions of the above, the policy adopted by the Committee of systematically examining the milk from the various herds within the County has been pursued during the past year.

The details of such examinations, together with other information bearing thereon, are presented in tabular form facing this page.

Samples have been collected by the Sanitary Officers in each Urban and Rural District in the Administrative County. The total number of such samples collected during the year was 261. As a matter of interest the samples taken during 1927 (October-December) have been incorporated in the table referred to, bringing the gross total to 318, which represents the milk of 2,872 cows, or 23.5% of the milch animals of the County.

Of this number, 15 (or 0.52%) were found to be definitely tubercular and were slaughtered under the Tuberculosis Order. This number merely indicates the number of cows which were giving tubercular milk at the time the sample was collected and is not to be taken as an indication of the number of animals slaughtered under the Tuberculosis Order for the period under review. In 13 cases it was possible to obtain copies of the post-mortem findings and it is interesting to

MILK AND DAIRIES ORDER, 1926.

SUMMARY OF ROUTINE EXAMINATION OF MILK SAMPLES, 1928.

District.	No. of Cow-keepers.	No. of Cows.	Milk Samples.			No. of Samples found to be Tubercular.	No. of Cows slaughtered in consequence	Result of Post-mortem examination. Organs affected.	Remarks.
			Oct., 1927 to Dec., 1928.	No. of Cows represented.	% of Cows tested.				
1. Berwick M.B....	47	208	10	50	24.3	1	1	T.B. Udder.	
2. Blyth M.B. ...	15	117	12	84	86.6	...	...
3. Morpeth M.B....	2	33	2	31	100.0	...	...
4. Wallsend M.B.	13	123	14	132	94.6	1	2		
5. Alnwick U.D....	27	180	10	94	59.7	...	...
6. Amble U.D. ...	7	99	8	73	82.0	...	...
7. Ashington U.D.	5	69	7	80	74.0	...	...
8. Bedlington U.D.	50	443	19	180	40.6	*2	1	Lungs, udder, pleura.	*One sample untraceable, owing to movement of cows
9. Cramlington U.D.	13	124	4	36	28.1	...	...
10. Earsdon U.D....	24	166	8	44	25.1	1	2	Lungs, udder, mesentery (2).	
11. Gosforth U.D.	5	60	8	66	85.7	1	1	Lungs, udder, mesentery.	
12. Hexham U.D....	24	243	7	†18	7.4	...	...		†No. of cows uncertain. Samples taken from dealers.
13. Longbenton U.D.	23	348	12	107	33.8	...	...
14. Newbiggin U.D.	4	40	8	51	100.0	...	...
15. Newburn U.D.	23	250	11	102	45.7	1	3	Lungs, udder, mesentery.	
16. Prudhoe U.D....	28	295	11	98	36.9	...	...
17. Rothbury U.D.	8	23	8	19	82.6	...	...
18. Seaton Delaval U.D. ...	17	169	12	132	80.9	...	...
19. Seghill U.D. ...	3	56	3	47	83.9	1	3	Lungs, udder (2), mesentery (1)	
20. Weetslade U.D.	7	50	7	50	62.5	1	1	Lungs, udder, supra-mammary gland.	
21. Whitley & Monkseaton U.D.	9	104	7	67	62.0	...	...
22. Alnwick R.D....	52	475	8	61	13.5	...	...
23. Belford R.D. ...	23	278	8	66	26.2	...	...
24. Bellingham R.D.	20	200	11	41	20.5	...	...
25. Castle Ward R.D.	83	1,200	8	83	8.8	...	...
26. Glendale R.D.	33	156	8	42	33.3	...	...
27. Haltwhistle R.D.	53	516	8	115	23.2	...	...
28. Hexham R.D.	553	4,610	55	641	15.2	...	...
29. Morpeth R.D....	161	1,937	8	128	7.4	1	1	Lungs, udder, liver, mesentery.	
30. Norham & Islandshires R.D.	38	208	8	73	36.3	...	...
31. Rothbury R.D.	19	174	8	71	49.3	...	...
	1,389	12,954	318	2,872	23.5	10	15		

N.B.—3.14% of the samples examined were found to be infected with Tuberculosis, 4.27% of the “herds” were found to be giving tubercular milk, and 0.52% of the cows examined were found to be giving tubercular milk.

note that in 11 of these the lungs were infected, which suggests the channel of entry of infection and emphasises the absolute necessity for disinfection and cleanliness in the byre. In 12 out of the 13 cases the udder was infected, thus directly contaminating the milk with Tubercle Bacilli.

The value of sampling is evident when it is realised that but for the employment of this process it is extremely improbable that any of the above 15 animals would have been detected at this stage and would therefore have continued to infect the bulk supply of milk from the respective herds, and also to communicate the disease to other animals.

The tabular statement referred to shows the number of cowkeepers (and cows) within the Administrative County, and the number of samples obtained from each County district.

The actual number of "herds" represented by the 318 samples was 234. Of this number 10 samples were found to be "positive," or in other words 4.27% of the herds examined were found to be giving tubercle infected milk.

In addition to the foregoing examinations 255 cows were clinically examined by the Council's veterinary officers in consequence of "reports" received from other Authorities. Thirteen such reports were received during the year, and 48 samples of milk were taken and submitted to the County laboratory for biological test. Three of these samples were found to contain tubercle bacilli. Four cows were in consequence taken and slaughtered under the Tuberculosis Order.

COUNTY BACTERIOLOGICAL LABORATORY, 1928.

During the year the following specimens were examined in the Laboratory :

Nature of Specimen.	Positive.	Negative.	Total.
Sputa for B.Tuberculosis	270 (265)	1,342 (1,277)	1,612
Swabs for B.Diphtheriae	143 (89)	787 (571)	930
Specimens of blood, for Widal (enteric) reaction	31 (40)	70 (66)	101
Samples of Milk for B.Tuberculosis (biological test)	20 (No result, 3)	310	333 (72)
Samples of Water ... ..	...	...	19
Various other Specimens ... ..	...	...	118 (25)
(Figures in brackets—1927).		Total	3,113(2,405)

Under the heading various other Specimens in the above table there were :—

Specimens of Faeces ...	93	(B.Typhosus 1, B.Dysenteriae Flexner 1, B.Morgan 1, and Atypical B.Dysenteriae 4).
„ Urine ...	11	(B.Tuberculosis 3).
„ Blood ...	2	(both Agglutinated B.Dysenteriae Flexner).
„ Pleural Fluid	1	(B.Tuberculosis.)
„ Pus	2	
„ Cerebro-spinal Fluid,	3.	
„ Milk (Count. and Coli content),	6.	

The following table shews the numbers of specimens received from the various districts in the county :—

DISTRICT.	Tuber- culosis.		Diph- theria.		Agglutin- ations (Widal).		Milks for Tuberculosis.	Other Specimens.	Total.
	Positive.	Negative.	Positive.	Negative	Positive.	Negative.			
MUNICIPAL BOROUGHES.									
Berwick-on-Tweed ...	5	23	1	6	—	2	6	—	13
Blyth	39	102	2	20	1	1	8	—	173
Morpeth	3	31	1	4	—	—	2	—	41
Wallsend	57	226	4	43	1	3	8	3	345
URBAN DISTRICTS.									
Alnwick	6	26	3	8	—	1	8	1	53
Amble	2	7	16	16	—	—	8	—	49
Ashington	22	121	—	3	5	1	3	3	158
Bedlingtonshire ..	15	107	2	44	3	3	19	2	195
Cramlington	1	27	—	—	—	—	4	—	32
Earsdon	7	30	—	2	—	—	8	—	47
Gosforth	7	52	3	74	1	—	4	4	145
Hexham	8	71	—	12	1	3	7	—	102
Longbenton	8	27	2	7	—	2	8	1	55
Newbiggin-by-the-Sea	4	55	—	4	—	—	6	2	71
Newburn	10	41	3	8	—	—	7	1	70
Prudhoe	—	48	—	2	—	—	7	2	59
Rothbury	—	—	—	—	—	—	8	—	8
Seaton Delaval	8	26	—	2	—	—	8	1	45
Seghill	—	3	—	—	—	—	—	—	3
Weetslade	3	17	10	33	—	1	7	—	71
Whitley & Monkseaton	22	65	6	48	3	2	3	6	155
RURAL DISTRICTS.									
Alnwick	3	22	8	24	—	2	8	—	67
Belford	2	6	—	3	—	—	8	—	19
Bellingham	4	14	3	23	—	—	7	—	51
Castle Ward	7	69	12	44	1	5	8	2	148
Glendale	1	9	—	3	—	—	8	—	21
Haltwhistle	7	16	—	1	—	—	8	6	38
Hexham	4	26	—	18	—	2	47	—	97
Morpeth	11	49	2	15	3	1	8	1	90
Norham & Islandshires	—	—	—	—	2	1	8	—	11
Rothbury	—	7	12	60	—	1	8	2	90
HOSPITALS	—	—	52	246	10	37	1	78	424

THE SALE OF FOOD AND DRUGS ACTS.

The County Council is the administrative authority under the above Acts throughout the administrative county, excepting in the area of the Borough of Berwick-upon-Tweed. Samples for examination by the County Analyst are taken by the police. The results of the analyses of samples

taken during 1928 and the percentage of those found to be adulterated are shewn in the subjoined table.

No. of Samples taken.	Description of Article.	Result of Analysis.			Percentage of Samples Not Genuine.	Vendor Prosecuted.	Convictions including cases dismissed on payment of costs.
		Genuine.	Not Genuine.	Doubtful.			
2	Arrowroot ...	2	—	—	—	—	—
21	Baking Powder ...	21	—	—	—	—	—
2	Beef Suet...	2	—	—	—	—	—
1	Blanc Mange Powder ...	1	—	—	—	—	—
1	Bramble Jelly ...	1	—	—	—	—	—
66	Butter ...	65	1	—	1·51	1	—
9	Corn Flour ...	9	—	—	—	—	—
6	Custard Powder ...	6	—	—	—	—	—
6	Cream of Tartar ...	6	—	—	—	—	—
19	Coffee ...	17	2	—	10·53	—	—
19	Cocoa ...	19	—	—	—	—	—
1	Cheese ...	1	—	—	—	—	—
6	Cream ...	6	—	—	—	—	—
2	Condensed Milk ...	2	—	—	—	—	—
3	Cake Flour ...	3	—	—	—	—	—
1	Fruit Syrup ...	1	—	—	—	—	—
1	Flour ...	1	—	—	—	—	—
8	Ground Rice ...	8	—	—	—	—	—
2	Ground Coconut ...	2	—	—	—	—	—
4	Ground Ginger ...	4	—	—	—	—	—
8	Ground Almonds ...	8	—	—	—	—	—
1	Gravy Salt ...	1	—	—	—	—	—
1	Honey ...	1	—	—	—	—	—
1	Icing Sugar ...	1	—	—	—	—	—
17	Jam ...	17	—	—	—	—	—
10	Jam and Jelly ...	9	1	—	10	—	—
21	Lard ...	21	—	—	—	—	—
4	Lemon Curd ...	4	—	—	—	—	—
1	Lemon Cheese ...	1	—	—	—	—	—
1	Lemon Crystals ...	1	—	—	—	—	—
233	Milk ...	212	21	—	9·01	15	11
2	Mustard ...	—	2	—	100	—	—
33	Margarine ...	33	—	—	—	—	—
1	Milk Pudding Mixture	1	—	—	—	—	—
3	Mincemeat ...	3	—	—	—	—	—
1	Malt Vinegar ...	1	—	—	—	—	—
3	Meat Products ...	3	—	—	—	—	—
5	Mixed Dry Fruits ...	5	—	—	—	—	—
8	Meat Pastes ...	8	—	—	—	—	—
2	Non Alcoholic Wine ...	2	—	—	—	—	—
1	Olive Oil ...	1	—	—	—	—	—
4	Pepper ...	4	—	—	—	—	—
1	Potted Meat ...	1	—	—	—	—	—
1	Rice Cake ...	1	—	—	—	—	—
4	Sauce and Pickles ...	4	—	—	—	—	—
6	Semolina ...	6	—	—	—	—	—
2	Sweets ...	2	—	—	—	—	—
3	Self-raising Powder ...	3	—	—	—	—	—
7	Sugar ...	7	—	—	—	—	—
6	Sausage ...	6	—	—	—	—	—
23	Sausage & Sausage Meat	23	—	—	—	—	—
1	Soup Cubes ...	1	—	—	—	—	—
3	Suet ...	3	—	—	—	—	—
7	Tea ...	7	—	—	—	—	—
3	Table Jelly ...	3	—	—	—	—	—
1	Tapioca ...	1	—	—	—	—	—
1	Tartaric Acid ...	1	—	—	—	—	—
26	Vinegar ...	24	2	—	7·69	2	2
3	White Pepper ...	3	—	—	—	—	—
3	Whiskey ...	2	1	—	33·33	—	—
642		612	30	—	4·67	18	13

The percentages of samples found on analysis to be "not genuine" were, for the ten years 1919 to 1928 inclusive, as follows:—6·07, 6·2, 6·4, 8·2, 7·1, 5·4, 7·1, 8·2, 7·01 and for 1928, as shown above, 4·67

Berwick-upon-Tweed.—The following table indicates particulars of samples taken, and results of analyses, etc., during the year. A total of 40 samples were submitted for examination.

Nature of Sample.	No. of Samples taken.	Found Genuine.	Doubtful	Non-Genuine.	Prosecutions.	Convictions.
Milk	17	14	—	3	—	—
Butter	6	5	—	1	—	—
Cream	3	3	—	—	—	—
Coffee	1	1	—	—	—	—
Marmalade	2	2	—	—	—	—
Honey	2	2	—	—	—	—
Jam	2	2	—	—	—	—
White Pepper	1	1	—	—	—	—
Lard	1	1	—	—	—	—
Sausage	1	1	—	—	—	—
Pork and Beans	1	1	—	—	—	—
Green Peas	1	1	—	—	—	—
Mince Meat	1	1	—	—	—	—
Tinned Peas	1	1	—	—	—	—
	40	36	—	4	—	—

The percentage of non-genuine samples is 10.0.

Public Health (Milk and Cream) Regulations.—The authorities responsible for the administration of these Regulations are those indicated under the Sale of Food and Drugs Acts. All samples of milk, cream, butter and margarine submitted for analysis from the County Council's administrative area were examined by the County Analyst for preservatives. In no case was the quantity found to be such as to justify proceedings being taken.

In the borough of Berwick-upon-Tweed, 17 samples of milk, 6 of butter, and 3 of cream were examined for preservatives. No action was taken under the Condensed Milk and Dried Milk Regulations.

RIVERS POLLUTION.

The Seaton Burn.—The coming into operation during the year of the new sewer constructed at the instance of the Seaton Burn Valley Joint Sewerage Board may be regarded as having brought to an end the long continued pollution of the Seaton Burn.

The new sewer is over 10 miles in length, commencing near Annitsford Bridge and discharging into the sea at Seaton Sluice.

Designed to carry the sewage of a population of 60,000 to 70,000, it is only required at present to serve a population of approximately 20,000, so that ample margin exists for its further utilisation by the development of the districts contiguous thereto, or by the connecting-up of other districts more remotely situated.

The work has involved an outlay of over £100,000, and the contributory authorities are the Urban Districts of Gosforth, Weetslade, Seghill, Longbenton, and Earsdon.

The Meggies Burn.—No appreciable improvement has taken place in the condition of this burn. The condition thereof near the point

NORTHUMBERLAND COUNTY COUNCIL.

HOUSING. Number of houses erected in Northumberland during the years 1920-1928 inclusive.

Reference : { "A" With State assistance. { "C" by Local Authority.
 { "B" without State assistance. { "D" by other persons.

No.	District.	1920.		1921.		1922.		1923.		1924.		1925.		1926.		1927.		1928.		Total.		Gross Total.
		A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	A.	B.	
1	Berwick M.B. ...	—	—	22	1	—	—	24	—	32	—	72	—	26	—	97	—	51	—	324	—	{ 387 }
		C.	D.																	7	56	
2	Blyth M.B. ...	—	—	65	1	218	—	220	—	55	—	—	—	50	—	—	—	—	—	608	—	{ 775 }
		C.	D.							4										53	114	
3	Morpeth M.B. ...	—	—	72	—	—	—	—	—	—	—	7	—	38	—	—	—	84	—	201	—	{ 250 }
		C.	D.							16										2	46	
4	Wallsend M.B. ...	—	—	34	—	144	—	28	—	23	—	120	—	252	—	248	*48	—	—	849	—	{ 1260 }
		C.	D.							34		75	6	30		44	2	14		197	—	
5	Alnwick U.D. ...	—	—	12	3	24	—	—	—	24	—	18	—	6	—	23	—	—	—	107	—	{ 187 }
		C.	D.							2		19		17	8	18	2	3		64	16	
6	Amble U.D....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	{ 77 }
		C.	D.							13		47		2		8				70	7	
7	Ashington U.D. ...	—	—	—	—	104	—	64	—	128	—	—	—	50	—	48	—	—	—	394	—	{ 937 }
		C.	D.							68		212		157	5	3	2			473	70	
8	Bedlington U.D. ...	—	—	78	—	148	—	47	—	—	—	20	—	58	—	150	—	—	—	454	—	{ 845 }
		C.	D.							181		97	5	27	2	7	5	2		376	15	
9	Cramlington U.D. ...	—	—	61	—	181	—	—	—	—	—	—	—	—	—	—	—	—	—	242	—	{ 279 }
		C.	D.																	10	27	
10	Earsdon U.D. ...	—	—	43	—	114	—	—	—	70	—	100	—	53	—	170	—	14	—	564	—	{ 812 }
		C.	D.							19		41		37		62		64		242	6	
11	Gosforth U.D. ...	—	—	—	—	28	—	20	—	18	—	18	—	56	—	46	—	6	—	192	—	{ 749 }
		C.	D.							51		54		62	38	88	26	10		265	292	
12	Hexham U.D. ...	—	—	—	—	63	—	—	—	6	—	25	—	54	—	28	—	—	—	176	—	{ 257 }
		C.	D.									4	8	6	13	3	13	1		14	67	
13	Longbenton U.D. ...	—	—	10	—	32	—	—	—	—	—	40	—	56	—	38	—	—	—	176	—	{ 516 }
		C.	D.							10		32		13	52	21	45	1		77	263	
14	Newbiggin-by-the-Sea U.D.	—	4	90	—	—	—	20	—	20	—	66	—	—	—	—	—	—	—	196	—	{ 318 }
		C.	D.							30		8		35						119	3	
15	Newburn U.D. ...	2	—	105	—	240	—	153	—	—	—	31	—	39	—	46	—	12	—	628	—	{ 728 }
		C.	D.							10		6		9	1	24	3	7		61	39	
16	Prudhoe U.D. ...	—	—	132	—	—	—	—	—	12	—	—	—	20	—	106	—	4	—	274	—	{ 329 }
		C.	D.							10		2		16		10		6		44	11	
17	Rothbury U.D. ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	{ 30 }
		C.	D.							1										6	24	
18	Seaton Delaval U.D. ...	—	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	{ 200 }
		C.	D.							10		14		1		8	5	6		39	161	
19	Seghill U.D....	—	—	28	—	—	—	—	—	—	—	—	—	—	—	60	—	15	—	115	—	{ 186 }
		C.	D.							12		34		8	1	11				65	6	
20	Weetslade U.D. ...	—	—	—	—	100	—	—	—	—	—	—	—	66	—	17	—	—	—	183	—	{ 391 }
		C.	D.							13		41		26		20	1	13		100	108	
21	Whitley & Monkseaton U.D.	—	12	41	—	127	—	4	—	—	—	49	—	92	—	94	—	—	—	407	—	{ 1959 }
		C.	D.							30		42		41	179	27	91	224		415	1,137	
22	Alnwick R.D. ...	—	—	10	—	26	—	—	—	—	—	—	—	24	—	24	—	13	—	84	—	{ 210 }
		C.	D.									3		32		26				74	52	
23	Belford R.D. ...	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	{ 132 }
		C.	D.							5		9		6	11	17	4	12		55	77	
24	Bellingham R.D. ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	{ 29 }
		C.	D.							3		1		3	1		3			14	14	
25	Castle Ward R.D. ...	—	24	24	—	32	—	—	—	8	—	—	—	20	—	—	—	—	—	84	—	{ 661 }
		C.	D.							5		50		47		64	23	26		246	331	
26	Glendale R.D. ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	{ 118 }
		C.	D.									11		11		16	9	5		43	75	
27	Haltwhistle R.D. ...	—	—	—	—	25	—	32	—	—	—	—	—	—	—	—	—	—	—	57	—	{ 93 }
		C.	D.									10		3		4	4			17	19	
28	Hexham R.D. ...	—	—	4	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	8	—	{ 289 }
		C.	D.							4		9		19		30	22	2		86	195	
29	Morpeth R.D. ...	—	—	—	—	88	—	—	—	—	—	—	—	—	—	—	—	—	—	88	—	{ 722 }
		C.	D.							92		112		85	23	4	7	2		296	338	
30	Norham & Islandshires R.D.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	—	14	—	24	—	{ 44 }
		C.	D.							1		2		1		1	1			5	15	
31	Rothbury R.D. ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	{ 95 }
		C.	D.																	5	90	
Total of "C."		2	—	831	—	1,710	—	565	—	396	—	567	—	960	97	1,205	48	200	—	6,436	145	6,581
"D."		45	108	88	263	51	221	131	720	595	719	938	584	697	520	542	297	453	312	3,540	3,744	7,284
Gross Total		47	108	919	263	1,761	221	696	720	991	719	1,505	584	1,657	617	1,747	345	653	312	9,976	3,889	13,865
		155	—	1,182	—	1,982	—	1,416	—	1,710	—	2,089	—	2,274	—	2,092	—	965	—	13,865	—	13,865

* In pursuance of a "reconstruction" scheme.

of discharge into the sea is one that calls for drastic treatment, being both a nuisance and a danger to the health of the community.

River Coquet.—The installation of sewage treatment plant to deal with the sewage from the village of Felton has not yet been undertaken by the Alnwick Rural District Council. Meanwhile the pollution of the river continues.

River Tyne and Tributaries.—No alteration has taken place with regard to the several instances of pollution which have been reported upon from time to time as affecting the Rivers Tyne, North Tyne and tributaries.

Bedlingtonshire.—A comprehensive scheme for the construction of a new sewer in the Bedlingtonshire Urban District was promoted during the year. The effect of this work will be to terminate numerous instances of pollution of streams and water courses at present existing.

HOUSING.

The tabular statement on Housing has been brought up to date by the inclusion of the figures for 1928.

The total number of houses completed during the year was 965. This figure shows a considerable falling off compared with the years immediately preceding, and is, in fact, the lowest since 1920.

The number of houses provided in the county since the inception of the assisted schemes has now reached a total of 13,865. Of these, 6,581, or nearly one half, have been provided by Local Authorities, and 9,976 (nearly 72%) were "state-aided."

Of the 3,889 houses built without the aid of a "subsidy," no less than 1,137 (nearly one-third) have been built in the Whitley and Monkseaton District. The next largest contributors being Morpeth Rural 338, Castle Ward 331, Gosforth 292, and Longbenton 263.

The last column in the tabular statement shows the total houses erected in the county from 1920 to date, from which it will be noted that the greatest activity has taken place in Whitley and Monkseaton Urban District, where nearly 2,000 houses have been constructed during the ten years under review. Next in order follow:—Wallsend 1,260, Ashington 937, Bedlington 845, Earsdon 812, Blyth 775, Gosforth 749, Newburn 728, and Morpeth Rural 722.

ISOLATION HOSPITALS.

The amount of hospital accommodation available for the isolation of infectious disease was as indicated in the subjoined table. The population of the 30 Sanitary Districts for which isolation hospital accommodation was provided was 400,173, and the beds provided numbered 531, independently of the accommodation at port hospitals, giving one bed for each 754 of population. The notable features of the year were:—

An arrangement made by the urban and rural district councils of Rothbury to join with the Alnwick urban and rural, and Belford rural district councils, in their joint hospital area for the treatment of Small-pox, the use of the hospital situated in the rural district of Rothbury for the reception of cases of Small-pox from the Rothbury urban and rural districts being discontinued.

Newbiggin-by-the-Sea is the only district in the county without means for isolating cases of infectious disease.

	Popula- tion served.	Number and kind of hospitals provided.	Beds provided for		
			Small- pox.	Infectious diseases other than Small-pox	Small-pox or other Infectious diseases.
I. JOINT HOSPITAL DISTRICTS.					
(1) <i>Earsdon Joint Hospital District—</i>					
Earsdon U.D.	68,756	Iron buildings :— At Earsdon Grange (1) Two permanent brick buildings and †One iron building At Scaffold Hill (1)	16	...	...
Seghill U.D.					
Whitley & Monkseaton U.D. ... ..			...	72	...
Longbenton U.D.					
Seaton Delaval U.D.					
Cramlington U.D.					
(2) <i>Gosforth, Newburn, and Castle Ward Joint Hos- pital District—</i>					
Gosforth U.D.	63,798	Permanent building ...	...	32	...
Newburn U.D.					
Weetslade					
Bellingham R.D.					
Castle Ward R.D.					
(3) <i>The urban and rural dis- tricts of Alnwick and Rothbury and the rural district of Belford—</i>					
Alnwick U.D.	30,006	Iron and wood building	12	...	...
Alnwick R.D.					
Rothbury U.D.					
Rothbury R.D.					
Belford R.D.					
(4) <i>The urban and rural dis- tricts of Rothbury—</i>					
Rothbury U.D.	5,808	do.	...	8	...
Rothbury R.D.					
(5) <i>Hexham rural and Prudhoe—</i>					
Hexham R.D.	30,654	do.	12	16	...
Prndhoe U.D.					
(6) <i>Longtown and Border—</i>					
Alston, etc., R.D.	*8,916	do.	...	16	...
Brampton R.D.					
Longtown R.D.					
Haltwhistle R.D.					
II. HOSPITALS PROVIDED BY INDIVIDUAL SANITARY AUTHORITIES.					
Berwick M.B.	11,890	{ One wooden building	8	...	...
Blyth M.B.	31,840	{ Iron & wood building	...	30	...
Morpeth M.B.	7,197	{ Permanent building ...	14	...	...
Wallsend M.B.	44,440	{ Iron building ...	4	...	...
		{ Brick building ...	...	20	...
Alnwick U.D.	6,876	{ Permanent building	20	...	...
		{ do. ...	...	86	...
Amble U.D.	4,039	Permanent building ...	...	12	...
Ashington U.D.	29,040	{ Iron bnilding }	4	...	...
		{ Brick building }	...	45	...
Bedlingtonshire U.D. ...	28,110	{ One brick building ...	10	...	...
		{ Iron & brick building	...	18	...

† Now used only in cases of emergency.

* In this County.

		Popula- tion served.	Number and kind of hospitals provided.	Beds provided for		
				Small- pox.	Infectious diseases other than Small-pox	Small-pox or other Infectious diseases.
II. HOSPITALS PROVIDED BY INDIVIDUAL SANITARY AUTHORITIES— <i>contd.</i>						
Gosforth U.D....		16,330	Permanent building ...	14	...	...
Hexham U.D. ...		8,525	Two iron and wood buildings	8	16	...
Newburn U.D. ...		20,450	One iron and wood building	4	...	...
Glendale R.D. ...		8,101	Two cottages ...	...	...	8
Morpeth R.D. ...		19,740	One iron and wood hospital	20	...	..
Norham and Island- shires R.D. ...		5,121	do. ...	6	...	...
River Tyne Port Sanit- ary Authority			Floating hospital ...	...	...	30
River Blyth Port Sanit- ary Authority			Permanent building ...	...	20	(Cholera, Plague, Yellow Fever or Small-pox)
III. SANITARY AUTHORITIES HAVING MADE ARRANGE- MENTS FOR PATIENTS TO BE RECEIVED BY NEIGHBOURING SANIT- ARY AUTHORITIES.						
Blyth U.D. ...		31,840	Patients from this district are received into the hospital of the Blyth Port Sani- tary Authority	...	...	...
Weetslade U.D. ...		7,688	Patients from this dis- trict are received into the Gosforth, Newburn and Castle Ward Joint Hospital	...	...	...
Bellingham R.D. ...		5,440	do. ...	...	...	...
Castle Ward R.D. ...		13,890	Smallpox cases are re- ceived into the Gos- forth U.D. Smallpox Hospital	...	...	...

VENEREAL DISEASES REGULATIONS.

The treatment centre provided for county patients under the scheme undertaken by the County Council in conjunction with neighbouring authorities is at the Royal Victoria Infirmary, Newcastle. In the following table particulars are given in relation to treatment during 1928 and (for comparison) 1927.

	1927.			1928.		
	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
1A. Under treatment or observa- tion at beginning of year...	138	44	182	175	55	230
1B. Returned for treatment after having ceased to attend during the previous year...	23	5	28	25	8	33
2. Dealt with for the first time	289	91	380	270	113	383
3. Ceased to attend before com- pletion of treatment and observation	166	47	213	139	74	213
4. Transferred to other centres	13	2	15	13	1	14
5. Discharged after completion of treatment and observation	96	26	122	134	42	176
6. Under treatment or observa- tion at end of year... ..	175	55	230	184	59	243
7. Total attendances at out- patient clinic	5,675	1,356	7,031	5,651	1,561	7,212
8. Aggregate number of in- patient days	149	212	361	114	871	985

Irrigation stations are open, morning and evening, for gonorrhœa patients independently of the clinics.

The travelling expenses of necessitous patients to and from the clinics, are borne by the County Council.

Opportunity is afforded to medical practitioners in the area for consultations with the Medical Officer at the treatment centre, and they occasionally attend the clinics.

Bacteriological examinations under the scheme are carried out at the Durham University College of Medicine, Newcastle-upon-Tyne. The following statement gives the number and kind of tests undertaken at the laboratory during 1928 and indicates the extent to which medical practitioners availed themselves of the facilities provided by the County Council for such examinations.

Nature of Test.			For Treatment Centre.	For Practitioners.
For detection of spirochaetes			—	—
For detection of gonococci... ..			—	20
For Wassermann reaction			596	290
Other examinations :—				
Gonococcal Complement Fixation Tests			—	1
C.S. Fluid for Wassermann reaction ...			—	3
Urine for the detection of gonococci ...			—	1
Total			596	315

MATERNITY AND CHILD WELFARE.

*Professional Nursing in the Home.**(a) General.*

The County Council as a body do not undertake any specific nursing service but make grants to the County Nursing Association who undertake this work.

(b) For Infectious Diseases.

This is not generally undertaken by the County Nursing Association except in a few instances where Cottage Nurses are employed in the more remote parts of the county.

The County Nursing Association is an organisation on a voluntary basis which has for its object the nursing of the sick in their own homes; either by the daily visiting of a nurse or by the employment of a residential Cottage Nurse giving full time service to one patient. The Association has divided the county into small areas managed by a local committee, employing one or more nurses according to the population and requirements of the work. Cases requiring nursing are selected by the medical practitioners who may call for the services of the District Nurse should any of their patients need skilled nursing attention and be subscribers to the local Association. Non-subscribers may, by arrangement, be nursed at a special fee.

The County Council make a grant of £310 to the general funds of the Association, which money is apportioned to the poorer local areas at the discretion of the Committee of the County Nursing Association.

Midwives.

The County Council do not directly employ any midwives, nor do they pay any subsidy to any practising midwife. The County Nursing Association staff of District Nurses are all qualified midwives, and as such can act either as midwives or maternity nurses in their particular district as occasion requires.

In addition there were 60 notifications of intention to practice received from independent midwives who are not attached to any association.

Maternity Homes Registration, 1926.

The following table shews the position of the county with regard to Maternity and Nursing Homes :—

Number of Applications for Registration.	Number of Homes Registered.	Number of Orders made refusing or cancelling registration.	Number of Appeals against such Orders.	Number of Cases in which Orders have been		Number of Applications for Exemption from Registration.	Number of Cases in which exemption has been			
				Confirmed on Appeal.	Disallowed.		Granted.	Withdrawn.	Refused.	Disallowed on Appeal.
8	8	—	—	—	—	1	—	—	1	1

Inspection of Midwives.

The County Council is the Local Supervising Authority under the Midwives Acts of 1902 and 1908.

Midwives in the employment of the County Nursing Association are by arrangement inspected by the Superintendent of that Association, and

midwives who practise independently are inspected by the Superintendent of Health Visitors who is also Inspector of Midwives. Both officers report directly to the County Medical Officer.

During the year 238 midwives (235 trained and 3 untrained) notified their intention to practice; 28 left the county, 1 died, leaving 209 in practice at the end of the year.

913 Visits of inspection were made by the Inspector of Midwives.

The number of births registered was 7,486. In 2,204 of these the women were delivered by a midwife in her capacity as such, whilst 3,532 were attended by midwives acting as maternity nurses, and in 1,140 cases the mother was delivered by the midwife before the doctor engaged had arrived. From these figures it is assumed that in 610 cases the doctor was present without qualified assistance. Under Rule E, 20, of the Central Midwives' Board a midwife must send for medical help in cases of emergency which may occur in her practice. The number of notices that this medical help was necessary in the 2,204 cases attended by them was 429. The number of still-births reported by them was 113, and the number of deaths of newly born infants occurring in their practice before the services of a medical practitioner could be obtained was 2.

Ante-natal Care of Mothers.

Unfortunately the value of ante-natal care is still not sufficiently realised by the mothers who, in numbers of cases, do not engage their midwife or doctor at a sufficiently early date to allow of adequate ante-natal supervision from the early months of pregnancy. This is specially noticeable in those cases attended by independent practising midwives who frequently have to attend mothers in child birth without being previously engaged for the case. The County Nursing Association report that 10,333 ante-natal home visits were made during the year.

Medical Assistance under Rule E, 20.

The fees of doctors called to the assistance of midwives for emergency conditions are paid in the first instance by the County Council. In the 429 cases in which medical help was summoned the cost was £479 0s. 6d., of which sum £15 14s. 0d. was afterwards received from the patients.

Maternity Hospitals.

The County Council have no Maternity Homes but three hospitals have beds available for maternity cases on payment of fees which vary according to the amenities provided.

The War Memorial Hospital, Haltwhistle ...	...	2 beds.
The Willington Quay Maternity Hospital ...	...	14 beds.
The Wallsend & Willington Quay Hospital ...	...	8 beds.

Under the Council's scheme complicated cases, or cases where it is certified by the medical attendant that a woman cannot with safety be delivered in her own home, are received into the Princess Mary Maternity Hospital. During the year 63 such cases were admitted.

Hostel for Unmarried Mothers.

Unfortunately the Osborne Road Hostel, Newcastle-on-Tyne, closed down during the year, after a long period of good and useful work amongst the unmarried mothers admitted to their care.

Babies' Hospital.

Babies suffering from any infantile disease or dietetic error are on the certificate of their own medical attendant admitted to the Babies' Hospital, West Parade, Newcastle-upon-Tyne. During the year 7 infants were admitted at a cost of £45 10s. 4d.

Ophthalmia Neonatorum.

The following shews the incidence of this disease :—

Total Births.	Cases of Ophthalmia Notified.	Nursed at Home.	Removed to Hospital.
7,486 (Administrative County)	41	41	—

The following statement shews the incidence of Inflammation of, or Discharge from the eyes of infants delivered by midwives :—

Number of Births attended by Midwives alone.	Number of Cases for which Medical Aid was sought on account of Inflammation or Discharge from eyes.	Diagnosis of Ophthalmia Neonatorum made by Doctor called in to case.
2,204	24	14

Puerperal Fever and Puerperal Pyrexia.

Under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926, any febrile condition which occurs in a woman within 21 days after child birth, or miscarriage in which a temperature of 100.4 F. or more has been sustained or recurs during that period, is termed Puerperal Pyrexia. Every medical attendant on first becoming aware that a woman upon whom he is in attendance is so suffering shall notify the Local Medical Officer of the case and it is the duty of such Local Medical Officer to forward a copy of each notification to the County Medical Officer within 24 hours of its receipt. It is also the duty of Authorities administering the Maternity and Child Welfare Act with the consent of the Ministry to make special provision for the treatment of these women by consultation with an Obstetric Specialist, for skilled nursing and for hospital treatment.

The following shews the incidence of Puerperal Pyrexia and Puerperal Fever and their disposal :—

Number of Births.	Cases Notified of		Specialist Service obtained.	Removed to Hospital.	Nursed at Home.	Deaths.
	Puerperal Pyrexia.	Puerperal Fever.				
7,486	61	18	—	—	—	—

Case incidence in midwives' practice :—

Number of Births delivered by Midwives.	Number of cases in which medical help was summoned for rise of Temperature.	Diagnosis made by Doctor called in to case.	
		Puerperal Pyrexia.	Puerperal Fever.
2,204	29	15	7

Training and Supply of Midwives.

The County Council are empowered, under Circular 559 of the Ministry of Health, to render financial assistance to County Nursing Associations who are prepared to train and place midwives. These contributions (after approval by the Ministry of Health) rank for Exchequer grant.

For 24 midwives so trained and appointed within the area a grant of £30 was made to the County Nursing Association.

Illegal Midwifery Service.

It is a matter for regret that practice by unqualified women still persists. Section 1 of the Midwives and Maternity Homes Act of 1926 states that it is illegal for any person not being a certified midwife or medical practitioner to attend a woman in childbirth, except under the direction and supervision of a medical practitioner. One woman was summoned for this offence and bound over in the sum of £2.

INFANT WELFARE CENTRES.

At the commencement of the year there were eleven centres in the county, four of which were supported out of voluntary funds, the remainder being established by the County Council. At all the centres a Health Visitor of the County Council staff attends each session, thus ensuring some measure of co-ordination of work and uniformity of effort.

The premises used were not generally suitable, but great difficulty is experienced in obtaining suitable rooms or buildings where a waiting room, a weighing room, a consulting room, lavatory accommodation, and shelter for perambulators is available.

The following is a summary of the premises used :—

Church or Chapel rooms ...	...	...	...	6
Institutes, Village Halls ...	...	...	...	1
Premises hired from Local Authorities...	...	...	...	2
Wooden Huts ...	...	...	...	1
Cottage ...	...	...	...	1

Table 4 (see page 51) summarises the work at the Welfare Centres.

Extension of Infant Welfare Centres.—In July, 1928, the Council opened a new centre in Seghill.

Welfare Centres open during the year in the Council's area.

Centres under Control of County Council.	Session.	Arrangements for Medical Supervision.
Alnwick	...Mondays, 2—4 p.m.	...Dr. Stephens, Asst. County M.O.H. Dr. Bunting, Asst. County M.O.H. (after resignation of Dr. Stephens).
Berwick	...Tuesdays, 2—4 p.m.	...Dr. MacLagan, M.O.H.
Newbiggin	...Mondays, 2—4 p.m.	...Dr. Jackson, M.O.H.
Prudhoe	...Wednesdays, 2—4 p.m.	...Dr. Gabriel, Asst. County M.O.H.
Seaton Delaval	Thursdays, 2—4 p.m.	...Dr. Anderson, M.O.H., Cramlington.
Amble ...	...Mondays, 2—4 p.m.	...Dr. O'Sullivan, Asst. County M.O.H.
Lynemouth	...Tuesdays, 2—4 p.m.	...

Centres under control of Voluntary Committees.

Backworth	...Tuesdays, 2—4 p.m.	...Dr. Glen Davidson.
(Earsdon U.D.)	1st and 3rd Tuesdays open all day.	
Morpeth	...Mondays, 2—4 p.m.	...Dr. Dickie, M.O.H. Mor- peth Borough.
Seghill ...	...Mondays, 2—4 p.m.	...Dr. Henderson.
Stocksfield	...Alternate Wednesdays... 2—4 p.m.	...Dr. Spence.
Whitley Bay	...Mondays, 2—4 p.m.	...Dr. Thompson, Whitley Bay

TABLE 4.
INFANT WELFARE CENTRES.

Report on the Work for the Year ended December 31st, 1928.

		Amble.	Alnwick.	Berwick.	Morpeth.	Newbiggin.	Lynemouth.	Stocksfield.	Seaton Delaval.	Seghill.	Whitley Bay.	Backworth.	Prudhoe.	TOTALS.
Number of children transferred from 1927 Register to 1928 Register	aged under 1 year	60	14	37	44	158	20	6	65	...	45	66	13	528
	aged 1—5 years	181	21	27	7	80	10	31	35	...	59	77	47	575
Number of children who made their first attendance during 1928	aged under 1 year	74	48	49	89	140	45	34	78	56	109	155	110	987
	aged 1—5 years	7	6	...	...	18	4	8	35	58	45	22	28	231
Total attendances made	by mothers	919	501	408	1,303	2,659	746	342	1,749	494	2,080	2,094	913	14,208
	by children	840	512	379	1,103	2,478	730	378	1,578	482	2,247	2,059	1,064	13,850
Number of Ante-Natal mothers attending Centre for advice	1st visits	...	3	...	...	28	...	...	...	2	4	...	5	42
	subsequent visits	...	32	...	...	65	...	...	...	1	21	...	4	123
Number of Sessions each Centre was opened	half-days	52	45	52	50	50	50	25	50	25	44	30	51	524
	whole days	...	...	...	...	...	...	...	...	...	...	19	...	19
Number of attendances made	by Medical Officer	19	13	23	46	40	...	21	21	21	44	18	23	289
	by Health Visitor	52	45	51	47	50	50	21	50	25	44	50	49	534
Number of deaths of infants attending the Welfare Centres	aged under 1 year	...	...	1	1	2	...	...	2	1	...	2	1	10
	aged 1—5 years	1	...	1	...	...	...	...	3	...	...	1	1	7

Infant Mortality.

The number of babies born in the area administered by the County Council for Maternity and Child Welfare was 3,559. The number of deaths under one year was 199, giving an infant death rate of 55.91 per 1,000 births, as compared with 67 per 1,000 births for the whole of the county and 65 per 1,000 births for England and Wales. The death rate for illegitimate children is still unfortunately high; of 206 illegitimate babies born 23 died before they reached the age of one year, giving an infant death rate of 111.65 compared with 52.49 per 1,000 infants born in wedlock.

Infant Food.

Ambrosia, Glaxo and Virol are supplied at cost price to mothers attending the Infant Welfare Centres. During the year 12,535 lbs. of dried milk and 1,494 lbs. of Virol were sold.

Feeding of Necessitous Mothers and Children.

The following tables shew the applications dealt with under this scheme :—

No. of Expectant and Nursing Mothers.	No. of Children.	Milk Given Free.	Cost.
9	40	1,262 lbs.	£150 4s. 8d.

Health Visitors' Work.

There are now 32 Health Visitors who also act as School Nurses and Tuberculosis Nurses. Under the Council's scheme the county is divided into 30 district areas in each of which there is a resident Health Visitor who is responsible for all the visiting in that district. One Health Visitor is wholly employed in a specified area for Tuberculosis work and another acts as a peripatetic supply and conducts special and urgent enquiries.

Great difficulty has been experienced in filling vacancies owing to the dearth of suitable candidates, and the Council adopted the scheme of advancing salary during training.

Four candidates who were trained Nurses, holding the Certificate of the Central Midwives Board, were selected and sent to the College of Nursing London, for a six months' training, £70 being advanced in stated monthly sums during this training. In the bond of agreement the candidate is bound, after the completion of this training, and obtaining the Certificate of the Royal Sanitary Institute as a Health Visitor to enter into the service of the Council for a period of two years, during which time she repays to the Council the sum advanced towards her training.

The following is the number of visits paid by the Health Visitors under the Maternity and Child Welfare Scheme :—

Births registered in Administrative County.	First Visits to Infants.	Re-visits to infants under the age of 1 year.	Visits to Children, age 1—5 yrs.	Ante-Natal Visits.	
				First Visits.	Re-Visits.
3,559	3,622	10,710	32,654	315	152

Population and Number of Births.

The following table shows the population and number of births in areas administered by the County Council for Maternity and Child Welfare purposes.

Population.	Registered Births.	Notified Births.	% Notified.
219,565	3,559	2,647	74·37

Death rate of Legitimate and Illegitimate Children during 1928, for comparison.

No. of Legitimate births in Council's area	3,353	
No. of Illegitimate births in Council's area	206	
Total births	3,559	
No. of deaths of Legitimate Infants	176	=52·49 deaths per 1,000 Legitimate births.
No. of deaths of Illegitimate Infants	23	=111·65 deaths per 1,000 Illegitimate births.
	199	=55·91 deaths per 1,000 births.

(See Table 3.)

TABLE 1.

Table showing numbers of Births and numbers of Deaths under one year in Urban and Rural Districts and number of Deaths of Infants under one year investigated by Health Visitors.

	Alnwick Urban.		Amble Urban.		Berwick-on-Tweed Borough.		Cramlington Urban.		Earsdon Urban.		Morpeth Borough.		Newbiggin Urban.		Prudhoe Urban.		Rothbury Urban.		Seghill Urban.		Weetslade Urban.		Whitley & Monkseaton Urban.		Seaton Delaval Urban.		Alnwick Rural.		Belford Rural.		Bellingham Rural.		Castle Ward Rural.		Glendale Rural.		Haltwhistle Rural.		Hexham Rural.		Morpeth Rural.		Norham & Islandshires Rural.		Rothbury Rural.		TOTAL.		GROSS TOTAL:	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.						
Number of Legitimate Births ...	60	36	38	43	109	93	86	82	150	133	59	63	77	62	78	78	8	2	25	22	82	84	123	114	65	66	100	83	24	25	44	42	94	107	66	65	62	58	149	144	168	146	38	35	30	35	1,735	1,618	3,353	
Number of Illegitimate Births ...	2	3	1	1	8	9	6	5	5	1	4	3	4	7	5	6	2	...	3	1	2	3	4	4	5	6	4	1	7	5	3	2	5	4	6	6	7	9	12	8	13	5	4	10	36	1,843	1,716	3,559
Total number of Births ...	62	39	39	44	117	102	92	87	155	134	63	66	81	69	83	84	8	2	27	22	85	85	125	117	69	70	105	89	28	26	51	47	97	109	71	69	68	65	158	156	176	159	43	39	40	36	1,843	1,716	3,559	
Deaths of Infants under 1 year	Total ...	2	1	2	...	6	2	7	7	14	9	6	2	7	7	9	...	2	...	4	1	5	2	9	8	2	4	9	3	3	1	2	1	7	2	3	5	3	3	11	5	5	7	4	...	3	4	125	74	199
	Illegitimate	1	...	1	...	1	4	1	1	3	...	1	...	1	1	1	1	...	1	2	1	...	1	1	11	12	23	
Infantile Mortality Rates (per 1,000 births) ...	29	70	24	09	36	53	78	2	79	58	62	01	93	33	53	89	200	...	102	04	41	18	70	25	43	16	61	86	74	07	30	61	43	69	57	14	45	11	50	96	35	82	48	78	92	10				
Number of Deaths investigated (Legitimate) ...	3	1	2	1	6	3	7	6	14	10	6	2	7	5	8	2	2	...	3	1	5	2	8	7	3	4	8	...	3	1	2	1	8	2	3	6	1	3	10	5	3	7	3	...	4	2	119	71	190	
Number of Deaths investigated (Illegitimate)	1	...	1	3	1	1	3	1	...	1	1	1	...	1	1	2	...	1	9	10	19	
Total number of Deaths (under 1 year) investigated ...	3	1	2	1	6	4	7	7	14	10	6	2	7	8	9	2	2	...	4	1	5	2	8	7	3	4	8	3	4	1	3	2	8	2	3	6	2	3	11	6	5	7	4	...	4	2	128	81	209	
Causes of Death of Infants under one year in urban & rural districts																																																		
Prematurity	2	3	2	2	2	...	1	1	4	4	2	1	2	1	2	1	3	2	1	2	...	2	3	1	1	1	1	25	22	47		
Congenital debility and Injuries at Birth	1	2	1	2	2	3	2	3	2	1	1	...	1	...	1	3	...	1	5	...	1	...	1	...	2	2	2	2	1	...	1	1	27	17	44	
Congenital Heart Disease...	1	1	1	1	1	...	4	2	6			
Marasmus	1	...	1	1	2	1	1	1	1	3	3	6				
Convulsions	1	1	2	1	2	2	1	...	1	...	1	2	1	1	1	...	1	1	1	...	1	1	...	1	1	...	17	8	25		
Respiratory diseases	2	...	1	1	4	2	1	...	4	...	1	1	4	2	1	1	1	1	1	...	1	3	2	3	2	1	1	27	13	40		
Whooping Cough	1	1	1	1	1	3	2	5				
Enteritis	1	1	1	2	1	5	3	8				
Icterus Neonatorum	1	1	1	...	1	...	1	
Haemorrhage from Bowels	1	1	1	1	...	2	4		
Stenosis of the Bowel	1	1	3	...	3			
Intussusception	1	2	1	3			
Asphyxia Neonatorum	1	1	1	2	1	3			
Spina Bifida	1	...	1	1	...	1	2			
Tubercular Meningitis	1	1	1		
Meningitis—Non T.B.	1	1	2	...	2			
Congenital Syphilis	1	1	1		
Abdominal Tuberculosis	1	...	1	1	1	2			
Purpura	1	1	1		
Nephritis	1	1	1		
Accidental death	1	...	1			
Uncertified...	1	1	1	1	...	1			
	3	1	2	1	6	4	7	7	14	10	6	2	7	8	9	2	2	...	4	1	5	2	8	7	3	4	8	3	4	1	3	2	8	2	3	6	2	3	11	6	5	7	4	...	4	2	128	81	209	

TABLE 2.

Investigated cause of Deaths of Infants under one year, and Children aged 1-5 years, with age periods at which death occurred.

[illegible]

TABLE 3.

Investigated Cause of Deaths of Illegitimate Children under the age of one year, arranged in sanitary districts.

	Amble Urban.		Alnwick Urban.		Berwick-on- Tweed Boro.		Cranlington Urban.		Earsdon Urban.		Morpeth Borough.		Newbiggin Urban.		Prudhoe Urban.		Rothbury Urban.		Seghill Urban.		Weetslade Urban.		Whitley & Monkseaton Urban.			Seaton Delaval Urban.		Alnwick Rural.		Belford Rural.		Bellingham Rural.		Castle Ward Rural.		Glendale Rural.		Haltwhistle Rural.		Hexham Rural.		Morpeth Rural.		Norham & Islandshires. Rural.		Rothbury Rural.		TOTAL.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.						
Number of Illegitimate Births in the Administrative County	1	1	2	3	8	9	6	5	5	1	4	3	4	7	5	6	2	...	3	1	2	3	4	4	5	6	4	1	7	5	3	2	5	4	6	7	9	12	8	13	5	4	10	1	108	98				
Number of Illegitimate Deaths under 1 year	1	...	1	...	1	4	1	1	3	...	1	...	1	1	1	1	...	1	2	1	...	1	1	11	12				
Number of Illegitimate Deaths under 1 year investigated	1	...	1	3	1	1	3	1	...	1	1	1	...	1	1	2	...	1	9	10				
CAUSE OF DEATH.																																																				
Prematurity	1	2	1	...	1	1	1	3	4					
Congenital debility	1	1	1	...						
Convulsions	1	1	1	1	1	2				
Haemorrhage from the bowels	1	1	1				
Respiratory diseases	1	1	2						
Enteritis	1	1	...						
Stenosis of the bowel	1	...					
T.B. Meningitis	1	1	...				
Uncertified	1	1	...				
Total	1	...	1	3	1	1	3	1	...	1	1	1	...	1	1	2	...	1	9	10				

DEATHS NOT INVESTIGATED :
M. 2 and F. 2—Relatives left the County.

BLIND PERSONS ACT, 1920.

The Council has, under the Blind Persons Act, 1920, completed a full year's work in caring for the blind population of the County. This work has been specially valuable in attempting to co-ordinate the methods of employment, the giving of assistance, and in advancing the real interest of the blind in their homes.

The number of blind persons on the register on January 1st, 1928, was 285. During the year 46 new cases were reported, 18 died or left the County, leaving on the register on December 31st, 1928, 313 blind persons.

Classes for Blind.

A class for the purpose of teaching blind persons handicrafts was held during the year in the Tuberculosis Dispensary, Vine Street, Wallsend. On an average 5 pupils attended each class, these being held on alternate Wednesdays between the hours of 1.30 p.m. and 5 p.m. The total number of attendances was 120.

Home Teaching.

During the year the two home teachers have been active in visiting the blind in their homes to teach Braille and Moon type of reading, knitting and handicrafts. Their general welfare was also supervised and help and advice given when needed. The number of visits paid by these teachers was as follows :—

No. of visits for welfare purposes	...	...	...	...	...	1,335
„ „ to assist in filling in pension and other forms	...	...	...	...	...	1
„ „ for supervision of home workers	...	...	...	...	...	264
„ „ to give lessons	...	...	...	...	...	268
„ „ to trace removals	...	...	...	...	...	44
„ „ to investigate new cases notified	...	...	...	...	...	46
Total No. of visits—January 1st to December 31st, 1928...						1,958

Home Workers.

There are four blind persons who are approved as home workers by the Ministry of Health and, as such, receive a subsidy from the Ministry in proportion to their earnings. This approval is based upon the full time working capacity of the blind person and the amount earned by each. The work done is as follows :—

Piano tuning (2 piano tuners).

Basket making (1 basket maker).

Knitting (1 knitter).

There are in addition several blind persons who are termed casual workers and who are for various reasons unable to undertake full-time work.

Home occupation is essential to these people and brings considerable interest into their lives. Material is provided and they are instructed in the making of articles, which may in some cases, have no marketable value. Payment is made at a uniform rate of wages but no subsidy is given by the Ministry of Health as in the case of approved home workers

The number of articles received from blind workers during the year was :—

Knitted goods	...	...	...	192
Cane goods	...	...	...	492

Sales of Work.

Sales were arranged during the year as follows :—

Date. 1928.		Place.	Amount taken. £ s. d.		
Feb.	22nd	Morpeth	10	18	1
March	5th	Wallsend... ..	4	2	11
„	29th	Blyth	17	15	7
June	11th	Baekworth	12	13	9
Sept.	20th	} Haydon Bridge and Haltwhistle	29	11	5
„	21st				
„	26th	Seaton Delaval	11	11	10
Oct.	18th	Newbiggin	17	19	5
Private sales from C.M.O.'s Dept.			23	2	9
Total amount of sales for year...			£127	5	9

Employed Blind Persons.

Four blind persons were employed during the year at the Workshops for the Adult Blind, Breamish Street, Newcastle-on-Tyne. The County Council paid to these Workshops from January 1st to March 31st, 1928, a subsidy of £20 per annum per worker which was increased, at the request of the Workshops Committee, to £30 per annum per worker from April 1st to December 31st, 1928, this sum being used by the Workshops Committee to augment the wages earned by the blind persons.

Wireless Telegraphy (Blind Persons Facilities) Act, 1926.

In December, 1926, the above Act received Royal assent. Section 1 provides that a license to establish, maintain and work a wireless telegraph station for the purpose of receiving messages only, may be granted subject to such terms, conditions and restrictions as the Postmaster-General may think fit, but without payment of any fee, to any person who satisfies the Postmaster-General that he is a blind person within the meaning of the Act.

Section 2 defines a blind person for the purposes of the Act as being “any person (not being resident in a public or charitable institution or in a school) who produces to the Postmaster-General a certificate issued by or under the authority of the County Council or of the County Borough Council in which he is ordinarily resident, that he is registered as a blind person in the area of the County or County Borough.”

Fifty-eight such certificates were issued during the year.

Prevention of Blindness Scheme.

This scheme is devised with the intention of providing travelling facilities to those blind persons of all ages having existing pathological eye conditions (which, if left untreated, might lead to total blindness) and who are unable to pay their own travelling expenses to Newcastle when consulting a specialist at one or other of the Hospitals. Fourteen such visits were paid during the year at a cost of £1 12s. 6d.

Indigent and Unemployable Blind Persons.

One of the great problems at the moment is the unemployable blind. There are so many descriptions of this class of blind person that the term itself is apt to be misleading in character. It includes married women, who in the broad economic sense cannot be unemployed, those in possession of small private means who therefore do not desire work, those untrained and therefore unable to work, and those suffering from physical and mental defects in addition to blindness. The first two need not be considered, the third can be remedied, but the problem remains as to the best method of dealing with the latter two classes. It has been suggested

that hostels are in existence in various parts of the county, where these people could be placed and well cared for, but it seems inhuman to compel any blind person to leave friends and relatives and the small piece of territory he has always known as home. The only solution to this problem appeared to be the augmentation of the incomes of these unemployable blind persons up to a sum to be agreed upon. This was fixed at a minimum of 18/- and applications were invited from all blind persons having a personal income of less than this sum. The following shows the position at the end of the year :—

No. of blind persons upon register.	No. of applications received.	No. of Blind Persons in receipt of augmentation.
313	172	100

Libraries for the Blind.

Two Libraries continue to serve the area, Tynemouth with about 7,500 volumes available and Manchester with approximately 178,000 volumes. The latter has also the 150,000 volumes printed in Braille or Moon type by the National Library for the Blind, to which service any of their readers are entitled. Postage is entirely free, this being paid by the Library.

	Amount of grant.	Readers served.	No. of books available.	No. of volumes issued.
Tynemouth Library... ..	£35	21	7,500	553
Manchester Library... ..	£15	29	178,000 (approx.)	529

Adult Training.

During the year, 6 blind persons were in training at the Royal Victoria School for the Blind, Benwell Dene, Newcastle-upon-Tyne.

The following table relates to these cases :—

Number of blind persons in training.		Date admitted to Institution.	Date left Institution.	Still in training at end of year.	Present occupation.
Male.	Female.				
1	—	7/1/25	—	Yes	Applied for admission to workshops.
1	—	11/1/27	—	Yes	
1	—	11/1/27	31/7/28	—	
1	—	5/4/27	—	Yes	
—	1	18/2/25	—	Yes	
—	1	30/6/28	—	Yes	

Blind Children.

Blind children being educated at the Royal Victoria School for the Blind :—

Children in residence at beginning of year.	Children admitted during year.	Children left School during year.	In School, December 31st, 1928.
5	3	—	8

